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DOS BULLETIN

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WWW.ORTOPAEDI.DK

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Betingelser for optagelse i DOS
Alle læger med dansk autorisation kan optages i Dansk Ortopædisk Selskab.
Anmodning om indmeldelse i DOS kan kun ske via hjemmesiden:
www.ortopaedi.dk
Aktivér linket “Meld dig ind i DOS” og udfyld ansøgningen sammen med oplysninger om personlige data.

DOS-Bulletin

Udgiver
Dansk Ortopædisk Selskab

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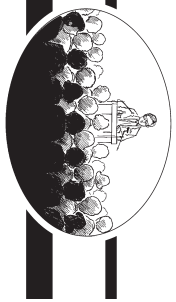
NÆSTE BULLETIN

DEADLINE: 01.04.2011
UDKOMMER: 05.05.2011

DOS ÅRSMØDET 2010



	Tirsdag 26-10		Onsdag 27-10	Torsdag 28-10	Fredag 29-10
08:00 – 08:30			I: hip/knee II: upper extrem. III: trauma / Arthroscopy *Lokaler. Se side 7*	DOS Symposium: Chronic low back pain and choice of treatment *Sal A*	V: hip - *sal A* VI: experimental - *sal B*
08:30 – 09:00					
09:00 – 09:30					
09:30 – 10:00					
10:00 – 10:30	Stiftende generalforsamling Yngre Ortopædkirurger *Copenhagen*		*Kaffe i udstilling*	*Kaffe i udstilling*	*Kaffe i udstilling*
10:30 – 11:00					
11:00 – 11:30			DOS Honorary Lecture: Karl-Göran Thorngren *sal A*	IV: Poster *Sal A*	Guildal Forelæsning: Klaus Parsch – *sal A*
11:30 – 12:00	*Frokost i foyer*				
12:00 – 12:30	Workshop: Hoftefrakturer *Reykjavik + Stockholm*	DOS Symposium: Treatment of the Periprosthetic Hip Fracture *Helsinki + Oslo*	*Frokost i udstilling*	*Frokost i udstilling*	*Frokost i udstilling*
12:30 – 13:00					
13:00 – 13:30			Møde i fagområder *Lokaler: se side 7*	Generalforsamling *Sal A*	VII: Foredrags-konkurrence – *sal A*
13:30 – 14:00					
14:00 – 14:30					DOS + Guildal Fonde Awards – *sal A*
14:30 – 15:00			*Kaffe i udstilling*	*Kaffe i udstilling*	
15:00 – 15:30					*Kaffe + adjourn i foyer*
15:30 – 16:00			Møde i fagområder (fortsat)	Generalforsamling (fortsat)	
16:00 – 16:30	Forum for ledende overlæger *Copenhagen*				
16:30 – 17:00					
17:00 – 17:30					
17:30 – 18:00					
18:00 – 18:30					
18:30 – 19:00					
19:00 – 19:30				*Gallamiddag*	

Udstillere

Firma	*Stand nr.*	*Areal*
Allergan-Danmark	21	3
ArthroCare Scandinavia	10	3
AstraTech A/S	37	3
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Simonsen & Weel A/S	23	3
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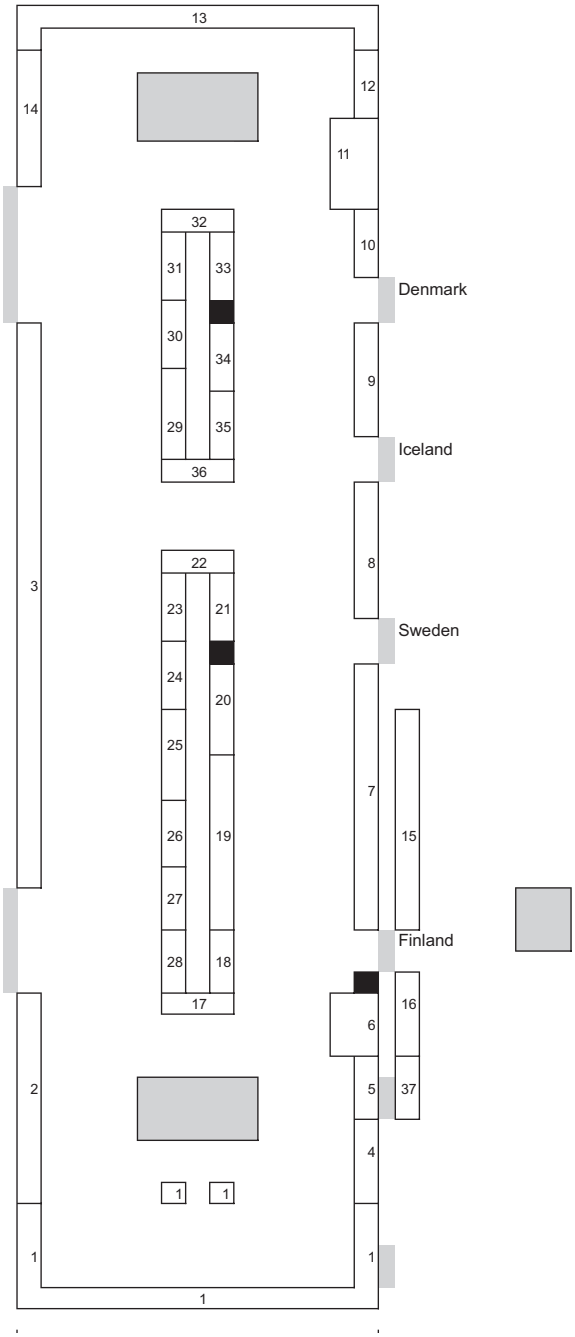
Sports Pharma Ortosupport ApS	30	3
Stryker Danmark	7	12
Swemac Orthopaedics ApS	19	8
Synthes A/S	15	10
Tornier Scandinavia A/S	25	4
Össur Nordic AB	6	6

Udstilling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DAGSPROGRAM

Tirsdag 26. oktober

10:00 - 11:30 **Stiftende generalforsamling i Yngre Ortopædkirurger**
(lokale: Copenhagen)

11:30 - 12:00 **Frokost**
(lokale: foyer)

12:00 - 16:00 **Workshop for yngre læger: Hoftefrakturer**
(lokale: Reykjavik + Stockholm)

12:00 - 16:00 **DOS Symposium: Treatment of the Periprosthetic Hip Fracture**
Arrangør: DSHK + DOT
(lokale: Helsinki + Oslo)

16:00 - 17:00 **Stiftende møde i Forum for Ledende Overlæger**
(lokale: Copenhagen)

DAGSPROGRAM

Onsdag 27. oktober

08:00 - 10:00 Session I + II + III
(lokaler: Helsinki og Oslo + Stockholm og Copenhagen + Reykjavik)

10:00 - 11:00 Kaffe i udstillingen

11:00 - 12:00 DOS Honoray Lecture
"EFORT: From where did we come, where are we just now, and where do we intend to go?"
Professor Karl-Göran Thorngren,
Lund University Hospital
(lokale: Sal A)

12:00 - 13:00 Frokost i udstillingen

13:00 - 14:30 Møder i fagområderne

	Lokale:
Håndkirurgi:	*Stockholm*
DOT:	*Oslo*
DSHK:	*Reykjavik*
Fod-ankel:	*Copenhagen*
SAKS:	*Helsinki*
Børneortopædi:	*Directors*
Ryginteressegruppen:	*Chairmans*
Skulder-albue:	*Executive*
Tumor:	*Lillebror*

14:30 - 15:30 Kaffe i udstillingen

15:30 - 18:00 Møder i fagområderne (fortsat)

DAGSPROGRAM

Torsdag 28. oktober

08:00 - 10:00	**DOS Symposium:** **Chronic low back pain and choice of treatment.** **(DOS – DORG)** *(lokale: Sal A)*
10:00 - 11:00	**Kaffe i udstillingen**
11:00 - 12:00	**Session IV: Poster session** *(lokale: Sal A)*
12:00 - 13:00	**Frokost i udstillingen**
13:00 - 14:30	**Generalforsamling** *(lokale: Sal A)*
14:30 - 15:30	**Kaffe i udstillingen**
15:30 - 17:30	**Generalforsamling (fortsat)** *(lokale: Sal A)*
19:00 - 19:30	**Gallamiddag – velkomst** *(lokale: Scandinavian Ballroom)*
19:30	**Gallamiddag** *(lokale: Sal A og B)*

Indtegning på bordplan til middagen slutter torsdag kl. 15:00!
Påklædning: Smoking eller mørkt tøj.

DAGSPROGRAM

Fredag 29. oktober

08:00 - 10:00 **Session V + VI**
(lokale: Reykjavik + Sal A)

10:00 - 11:00 **Kaffe i udstillingen**

11:00 - 12:00 **Guildal Forelæsning:**
"Treatment of Femoral shaft fractures in children - evaluation during the last 30 years."
Professor emeritus Klaus Parsch,
University of Heidelberg
(lokale: Sal A)

12:00 - 13:00 **Frokost i udstillingen**

13:00 - 14:00 **Session VII: Foredragskonkurrence**
(lokale: Sal A)

14:00 - 15:00 **Uddelinger:** DOS Fonden
Guildal Fonden
Awards: foredrag/poster
(lokale: Sal A)

15:00 - 15.30 **Kaffe + Adjourn**
(lokale: foyer)

DOS Honorary Lecture

Onsdag d. 27. oktober
11:00 - 12:00
Sal A

Professor Karl-Göran Thorngren, Lund

"EFORT:

From where did we come, where are we just now, and where do we intend to go?"

Guildal forelæsning

Fredag 29. oktober
11:00 - 12:00
Sal A

Professor emeritus Klaus Parsch, Heidelberg

"Treatment of femoral shaft fractures in children – evolution during the last 30 years"

Workshop

for basis- og introduktionslæger i ortopædkirurgi

Tirsdag d. 26. oktober
12:00 - 16:00
lokale: Reykjavik + Stockholm

I forbindelse med DOS´ årsmøde vil der blive afholdt en spændende workshop for yngre læger med interesse i ortopædkirurgi.

Emnet vil denne gang være:

Hoftefrakturer

Workshoppen starter med et 45 min. foredrag ved 1. reservelægerne Anders Troelsen og Henrik Palm fra Hvidovre Hospital med stikord som klassifikation og valg af operationsmetode, samt lejring, reponering og operativ teknik.

Herefter vil der være rotation mellem arbejdsstationer med praktisk afprøvning af osteosyntesemetoderne på frakturerede kunstknogler under kyndig vejledning.

Kurset afholdes i en hyggelig atmosfære med god mulighed for at møde andre yngre læger på samme niveau og danne netværk. Kurset belønnes med kursusbevis.

Deltagere:
Maks 30 yngre læger med interesse for ortopædkirurgi.
Niveauet vil være tilpasset kort eller slet ingen operativ erfaring.

Betaling:
Kursusgebyr 100 kr., som indbetales på konto-nr. **3001 0003086895**
Skriv: ”Tilmelding til workshop” og husk navn og arbejdssted!

Tilmelding: Til Henrik Palm, DOS’ uddannelsesudvalg, på e-mail hpalm@dadlnet.dk

DOS Symposium

"Treatment of the Periprosthetic Hip Fracture"

26th of October 2010
12:00 - 15:45
Venue: Helsinki + Oslo

DANSK ORTOPÆDISK TRAUMESELSKAB

Organizers: Danish Society for Hip and Knee Surgery (DSHK)
Danish Orthopaedic Society for Traumatology (DOT)

Sponsors: ***Smith & Nephew A/S and Synthes***

12.00 – 12.05	**Introduction**	Søren Overgaard (DK)
12.05 – 12.25	**Burden and risk factors for periprosthetic hip fractures**	Cecilia Rogmark (S)
12.25 – 12.55	**Diagnose and classification of periprosthetic hip fractures**	Clive Duncan (Can)
12.55 – 13.05	***Discussion***	
13.05 – 13.35	**Osteosynthesis of periprosthetic hip fractures:** *Rationale for healing: Blood supply, mechanical stability and bone contact. Indication for osteosynthesis*	Morten S Larsen (DK)
13.35 – 13.45	***Discussion***	
13.45 – 14.15	***Coffee break***	

14.15 – 14.45 Revision surgery in periprosthetic hip fractures*:*
Indication and strategy for revision surgery
The role of strut grafts Clive Duncan (Can)

14:45 – 14.55 ***Discussion***

14.55 – 15.15 Results after treatment of periprosthetic fractures:
Osteosynthesis of periprosthetic fracture
Michael Brix (DK)
Results from Danish Hip Arthroplasty Register
Søren Solgaard (DK)

15.15 – 15.45 Panel discussion: all presenters
(cases may be presented)

Søren Overgaard
President Danish Society for
Hip and Knee Arthroplasty Surgery
(DSHK)
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www.dshk.org

Morten Schultz Larsen
President Danish Orthopedic
Society for Traumatology
morten.s.larsen@ouh.regionsyddanmrk.dk
www.traumeselskab.dk

DOS Symposium

"Chronic low back pain and choice of treatment"

Thursday, October 28th, 2010
08.00 - 10.00, Sal A

The purpose of the symposium is to provide orthopaedic surgeons with an up-to-date knowledge about the evidence based choices of treatment in patients with chronic low back pain. Therefore, all attendees at the DOS meeting are welcome.

08.00-08.05 Welcome
Moderators: Benny Dahl and Biren Desai

08.05-08.20
Dr. Martin Gehrchen
Uninstrumented posterolateral lumbar fusion vs. total disc replacement. A multicenter randomized controlled trial.

08.20-08.35
Professor Tom Bendix
Evidence-based non-surgical treatment of chronic low back pain.

08.35-08.50
Professor Hans Tropp.
Instrumented posterolateral lumbar fusion vs. total disc replacement. A randomized controlled trial.

08.50-09.05
Biren Desai. Orthopädische Universitätsklinik der Universität Köln
Possibilities and limitations of lumbar intervertebral disc prosthesis.

09.05-09.20
Jörg Franke. Spine Unit, Department of Orthopedics, University of Magdeburg, Magdeburg, Germany.
360-fusion, dynamic options and minimal invasive approach. Comparison of different surgical possibilities.

09.20-10.00
Discussion

Stiftende møde

"Forum for ledende overlæger".

Tirsdag d. 26. oktober
16:00 - 17:30
Lokale: Copenhagen

Dagsorden:

Undertegnede har talt om vigtigheden af at have et forum for ledende overlæger, hvor vi kan drøfte/diskutere de opgaver vi har som ledende overlæger.

Vi indkalder derfor til et stiftende møde med det formål at vurdere, hvorvidt der er basis for at danne et sådant forum. Mødet finder sted i forbindelse med DOS` Årsmøde

Program:
- Velkomst og baggrund for mødet: 5 min. (Marianne Breddam).
- DOS` og ledende overlæger: 5 min. (Benn Duus).
- Klemt mellem krav og ressourcer: 15 min. (Frank Farsø Nielsen).
- Ortopædiens organisering i Region Nordjylland: 15 min. (Hans-Peter Jensen).
- Diskussion i grupper: Skal vi have et "Forum for ledende Overlæger"? Emner til et evt. næste møde: 20 min.
- Opsamling i plenum: 25 min.

Tilmelding senest: torsdag den 15. oktober 2010
På e-mail til: marianne.breddam@vest.rm.dk

Hans Peter Jensen, Frank Farsø Nielsen, Marianne Breddam

Møder i fagområderne:

Onsdag d. 27. oktober
13:00 - 14:30 og 15:30 - 18:00

HÅNDKIRURGI
(lokale: Stockholm)

TRAUMATOLOLGI
(lokale: Oslo)

DSHK
(lokale: Reykjavik)

FOD OG ANKEL
(lokale: Copenhagen)

SAKS
(lokale: Helsinki)

BØRNEORTOPÆDI
(lokale: Directors)

RYGINTERESSEGRUPPEN
(lokale: Chairmans)

SKULDER & ALBUE
(lokale: Executive)

TUMORLÆGERNE
(lokale: Lillebror)

Håndkirurgi

Onsdag d. 27. oktober
13:00 - 14:30 og 15:30 - 17:00
(lokale: Stockholm)

Håndledstraumer, tidlige og sene manifestationer - diagnostik og behandling

13:00-13:15
Wrist fractures and ligament lesions.
Jean Michel Cognet, Reims i Frankrig
(European Wrist Arthroscopy Society)

13:15-14:00
Arthroscopic reduction of intra articular distal radius fractures and treatment of ligament lesions. Practical explanations, tips and trickfs.
Jean Michel Cognet, Reims i Frankrig

14:00-14:10
Questions

14:10-1430
Håndledstraumer. Billeddiagnostiske muligheder for aklaring af skader.
Radiolog

14:30-15:30
Kaffepause i udstillingen

15:30-15:45
Malunions efter distale radius frakturer.
Per Hølmer, Hørsholm og
Hillerød Håndkirurgisk klinik.

15:45-16:15
Sent opdagede ligamentskader. Diagnostik og behandling.
Dorte Engelund, Hørsholm og
Hillerød Håndkirurgisk klinik.

16:15-17:00
Frie foredrag.

Generalforsamling i Dansk Selskab for Håndkirurgi

Onsdag d. 27. oktober
17:00 - 18:00
(lokale: Stockholm)

Dagsorden:

1. Valg af dirigent
2. Fremlæggelse og godkendelse af bestyrelsens beretning
3. Fremlæggelse og godkendelse af revideret regnskab
4. Vedtagelse af kontingent for 2011
5. Optagelse af nye medlemmer
6. Valg af bestyrelsesmedlemmer
7. Valg af revisorer
8. Indkomne forslag
9. Eventuelt

Forslag der ønskes behandlet på generalforsamlingen bedes fremsendt til formanden Niels Søe Nielsen på (mail: nsn@dadlnet.dk)

Efter generalforsamlingen vil der blive arrangeret spisning (for egen regning) et sted i nærheden af Scandinavia.
Tilmelding til spisning til Pernille Leicht
(mail: p.leicht@dadlnet.dk) senest 20.10.2010.

Traumatologi

Minisymposium: "Behandling af åbne frakturer"

Onsdag d. 27. oktober
13:00 - 14:30 og 15:30 - 18:00
(lokale: Oslo)

DANSK ORTOPÆDISK TRAUMESELSKAB

13.00-16.00	Minisymposium	(Moderator: Morten Schultz Larsen)
13.00-13.05	Introduktion	Morten Schultz Larsen
13.05-13.30	Initial behandling og klassifikation	Anders Troelsen
13.30-13.55	Behandlingsprincipper med plastikkirurgisk assistance	Henrik Eckardt
13.55-14.20	Behandlingsprincipper uden plastikkirurgisk assistance	Knud Stenild Christensen
14.20-14.30	Spørgsmål	
14.30-15.30	Kaffepause i udstillingen	
15.30-16.00	Paneldiskussion om åbne frakturer	
16.00-18.00	Generalforsamling	

Morten Schultz Larsen
Formand for Dansk Ortopædisk Traumeselskab
morten.s.larsen@ouh.regionsyddanmark.dk
www.traumeselskab.dk

DSHK

Onsdag d. 27. oktober
13:00 - 14:30 og 15:30 - 16:30
(lokale: Reykjavik)

Ordinær Generalforsamling

13:00-13:30

Dagsorden:

1. Valg af dirigent
2. Godkendelse af referat fra forrige generalforsamling
3. Formandens beretning
4. Fremlæggelse af regnskab og budget til godkendelse
5. Behandling af indkomne forslag
6. Forslag til vedtægtsændringer
7. Forslag til udredningsstrategi for patienter med metal-metal hoftealloplastik
8. Fastsættelse af kontingent
9. Valg af bestyrelse og suppleanter ved valgperiodens udløb
10. Valg af revisor
11. Eventuelt.

Indkomne forslag skal være bestyrelsen i hænde senest 2 uger før generalforsamlingen.

Søren Overgaard, formand DSHK

Fremlæggelse af Årsrapporterne fra registrene:

13:30 - 14:30	Årsrapport fra Dansk Knæalloplastik Register *Anders Odgaard*
14:30 -15:30	*Kaffepause*
15:30- 16:30	Årsrapport fra Dansk Hoftealloplastik Register *Søren Overgaard*

DSHK: Forslag til vedtægtsændringer

Dansk Selskab for Hofte- og knæalloplastikkirurgi stiller forslag om nedenstående vedtægtsændringer ved generalforsamlingen den 27.10.2010. Ændringerne er fremhævet med fede typer.

Vedtægter for Dansk Selskab for Hofte- og Knæalloplastik Kirurgi

§ 1: Dansk selskab for Hofte- og Knæalloplastik Kirurgi, DSHK, (Danish Society for Hip and Knee arthroplasty).

§ 2: Formål:
Selskabets formål er fagligt at styrke hofte- og knæalloplastikkirurgien i Danmark, dette sker ved:

At fremme den videnskabelige forskning inden for hofte- og knæalloplastik kirurgi.
At højne den faglige standard inden for hofte- og knæalloplastik kirurgi.
At medvirke til uddannelse inden for hofte- og knæalloplastik kirurgi.
At udbygge nationale og internationale relationer inden for forskning, klinik og uddannelse i relation til hofte-og knæalloplastik kirurgi.

§ 3: Medlemskab:
Som medlemmer optages medlemmer af Dansk Ortopædisk Selskab med interesse for hofte- og/eller knæalloplastik kirurgi.

Medlemmer der fratræder deres stilling eller bliver 67 år, fritages for kontingent, men bevarer stemmeretten. Medlemmer over 67 år kan ikke vælges til bestyrelse eller udvalg. Udmeldelse kan kun ske skriftligt til bestyrelsen med virkning til udgangen af regnskabsåret. Som udmeldt betragtes den, som ikke har betalt kontingent i 2 år. Genoptagelse kan kun ske efter betaling af restancen. Et medlem kan ekskluderes ved generalforsamlingsbeslutning med 2/3 majoritet efter motiveret indstilling fra bestyrelsen.

§ 4: Bestyrelse:
Bestyrelsen i Dansk Selskab for Hofte- og Knæalloplastik Kirurgi består af **6** medlemmer og en suppleant. **Mindst ét af medlemmerne skal på valgtidspunktet være yngre læge.**
Bestyrelsen vælges af generalforsamlingen for en 3 årig periode. Genvalg kan maksimalt finde sted 1 gang. Bestyrelsen konstituerer sig selv med formand, næstformand, sekretær, kasserer, redaktør/webmaster og et menigt medlem. **Ved stemmelighed er formandens stemme afgørende.**
Hvis formanden afgår i sin valgperiode, da kan den fra bestyrelsen, der overtager formandshvervet forblive i bestyrelsen i den resterende valgperiode som den afgående formand havde tilbage.

§ 5: Bestyrelsens opgaver:
Bestyrelsen leder selskabets daglige virksomhed.
Bestyrelsen fastsætter sin forretningsorden og sekretæren fører forhandlingsprotokol.
Bestyrelsen er ansvarlig for, at der som minimum afholdes faglige møder samt generalforsamling 1 gang årligt.

Bestyrelsen udnævner ad hoc udvalg m.h.p. at arrangere kurser og anden faglig aktivitet.
Bestyrelsen redigerer selskabets hjemmeside (www.DSHK.org).

§ 6: Rejser, som bestyrelsesmedlemmer og udvalgsmedlemmer foretager på selskabets vegne, betales efter DADL´s regler.

§ 7: Generalforsamling: Generalforsamlingen er selskabets højeste myndighed. Der holdes ordinær generalforsamling 1 gang årligt, indkaldt af bestyrelsen.
Generalforsamlingen er beslutningsdygtig, såfremt den er indkaldt senest 6 uger før den finder sted.
Dagsorden skal indeholde følgende punkter:
Valg af dirigent.
Godkendelse af referat fra **sidste** generalforsamling.
Formandens beretning.
Fremlæggelse af regnskab og budget til godkendelse.

Behandling af indkomne forslag.
Fastsættelse af kontingent.
Valg **til** bestyrelsen
Valg af revisor
Eventuelt

Indkomne forslag skal være bestyrelsen i hænde senest 2 uger før generalforsamlingen. Vedtagelse sker normalt ved simpelt flertal på generalforsamlingen, dog kræver vedtægtsændringer 2/3 majoritet.
Selskabets regnskab skal være godkendt af revisor før fremlæggelse på generalforsamlingen. Revisoren vælges på generalforsamlingen for 2 år a**d** gangen.

§ 8: Ekstraordinær generalforsamling kan indkaldes af bestyrelsen og skal indkaldes, hvis mindst 1/3 af selskabets medlemmer skriftligt har udtrykt ønske herom.
Ved ekstraordinær generalforsamling skal bestyrelsen have tilsendt medlemmerne dagsorden 4 uger før generalforsamlingen finder sted.

Vedtaget ved den stiftende Generalforsamling 2. maj 2002; revideret ved den ordinære generalforsamling 22. maj 2003; revideret og vedtaget ved 4. generalforsamling den 18. maj 2006; revideret på ny ved ekstraordinær generalforsamling oktober 2008. Senest ændret ved generalforsamlingen den 27. oktober 2010.

Søren Overgaard
Søren Solgaard
Christian Pedersen
Henrik Husted
Anders Odgaard

Minisymposium:

Patientforsikring og Patientklagenævn
Lovgrundlag og forskelligheder

Onsdag d. 27. oktober
16:30 – 18:00
(lokale: Reykjavik)

Arrangør: Søren Solgaard

Indhold:
Afgørelser fra såvel Patientforsikring som Patienklagenævn medfører ikke sjældent undren eller utilfredshed hos de invloverede læger. Ved dette symposium vil vi gennem cases illustrere forskellighederne i lovgrundlaget samt retspraksis. Symposiet tager afsæt i alloplastikkirurgien, men har almen interesse. Alle medlemmer af DOS er velkomne.

Deltagere:
Souschef Agnes Hauberg, Sundhedsvæsenets Patientklagenævn

Vicedirektør Martin Erichsen, Patientforsikringsforeningen

Ledende overlæge Jens Erik Varmarken, Ortopædkirurgisk afdeling, Næstved sygehus

Overlæge dr.med. Søren Solgaard, Hofteklinikken, Hørsholm, Ortopædkirurgisk afdeling Hillerød

Tumorlægerne

Onsdag d. 27. oktober
13:00 - 14:30 og 15:30 - 18:00
(lokale: Lillebror)

Program:

1. Sarkomdatabasen:

Hvordan koder vi og hvordan får vi udtræk?

Det forventes at deltagerne medbringer de tilfælde, hvor kodning har givet anledning til tvivl.

Peter Holmberg Jørgensen

2. Samarbejde med SSG omkring databasen.

Gunnar Lausten

3. Hvordan administrerer vi pakkeforløbene på sarkomcentrene?

Rundbordssamtale

Johnny Keller

Johnny Keller, overlæge, dr.med
Tumorsektoren, Ortopædkirurgisk afd. E
Århus Umiversitetshospital

Generalforsamling i DOS

Torsdag 28. oktober

13:00 – 14:30 og 15:30 - 18:00

Radisson Blu Scandinavia Hotel i København, sal A

Dagsorden:

1. Valg af dirigent

2. Formandsberetning
    a. De løbende forretninger
    b. Specialeplanlægningen
    c. Fagområder samt selskabets struktur og visioner
    d. Relationer til internationale organisationer

3. Beretning fra udvalg og fagområder
    a. Uddannelsesudvalget
    b. DRG-udvalget
    c. Fagområderne
        I. Hånd
        II. Traume
        III. Ryg
        IV Skulder-Albue
        V. Fod-Ankel
        VI. Hofte- og Knæ
        VII. Børn
        VIII. SAKS
        IX. Tumor

4. Kasserens beretning
    a. Regnskab 2009-2010
    b. Kontingent 2010-2011

5. Dansk Ortopædisk Selskabs Fond
    a. Regnskab

6. Fremtidssikring af Dansk Ortopædisk Selskab
    a. Forslag til vedtægtsændringer

7. Valg til bestyrelse og udvalg
    a. Valg af formand
    b. Valg af næstformand
    c. Valg af redaktør
    d. Valg af kasserer
    e. Valg af formand for Uddannelsesudvalg
    f. Valg af formand for Videnskabeligt Udvalg
    g. Valg af formand for Kvalitetsudvalg
    h. Valg af 3 medlemmer til Videnskabeligt Udvalg

Eventuelt

Formandsberetning til Generalforsamlingen

Dansk Ortopædisk Selskab, 28. oktober 2010

1. Den løbende forretning

1.1. Status bestyrelse, medlemskaber mm

Efter generalforsamlingen i Odense den 1. maj 2009 har bestyrelsen i efteråret 2009 måtte tage afsked med vores redaktør *Sajida Afzal* der søgte nye udfordringer i udlandet, og samtidig byde velkommen til *Steen Lund Jensen*, der accepterede at overtage jobbet som redaktør af foreningens medlemsorganer. Bestyrelsen har således i de forgangne 18 måneder bestået af:

Redaktør *Sajida Afza* (*Steen Lund Jensen*), kasserer *Bo Sanderhoff Olsen*, sekretær Benny Dahl, næstformand *Benn Duus* samt formand *Per Kjærsgaard-Andersen*. Formanden for DOS's Uddannelsesudvalg *Finn Bjarke Christensen* blev i forbindelse med Generalforsamlingen 2009 afløst af *Niels Wisbech Pedersen*. Selskabets web-redaktør har i hele perioden været *Steen Lund Jensen.*

I perioden siden sidste generalforsamling har selskabet også per 1. september 2009 ansat Gitte Eggers som sekretariatsleder.
Der skal lyde en tak til mine kolleger i bestyrelsen samt til Niels, Steen, Gitte og Annette for et godt samarbejde. I har alle ydet en fornem indsats.
Bestyrelsen har i det forgangne periode afholdt 10 bestyrelsesmøder samt et seminar, som blev holdt sammen med Uddannelsesudvalget, repræsentanter for de 9 fagområder samt en række af vores samarbejdspartnere fra industrien.

I kalenderåret 2009 er selskabets medlemsantal atter vokset og er nu rekordstort med 964 medlemmer. Der skal lyde en særlig velkomst til vores 68 nye medlemmer:

Jaafar Ghariabi Al-Rabaee
Naja Bjørslev
Sammer Kadhum Al-Saadi
Peter David Møller Hansen
Laimonas Bendikas
Udo Lucas Paul Schröder
Jørgen Jacob Tofte Eschen
Guddi Marianne Uldall Steinfath
Shabir Agmad Rashidi
Harald Schubert Schmidt
Christian Akim Jacobsen
Rikke Meineche Schmidt
Mette Grøndahl Rosenstand
Jørn Therkildsen Guldhammer
Zaid Saadi Abdullah Al-Saadi
Ole Jakobsen
Nataliya Taeger
Shoresh Baban
Christian Linus Hastrup Sant
Wafer Hadi Mohamed Ali
Muaffak Abdul-Wahab M. Al-Ani
Kristen U. Hulthin Balle
Eva Posner
Ann-Sofie Broundal Ibfelt
Nikolaj Sebastian Winther
Nina Dyrberg Lorenzen
Stine Hangaard
Eva Wetke
Sarang Barvar
Mads Vinding
Ane Simony
Anker Schytte Rasmussen
Sanne Toftgaard Christensen
Jose De Jesus Cordeiro
Mathias Hjort
Lene Rahr Wagner
Lasse Pedersen
Rune Tønnesen
Jens Trærup
Allan Evald Nielsen
Mette Lønstrup Harving
Camilla Mersø
Lydia Helms
Jesper Høeg Vinther
Kutaiba Abdelilah Hussein
Jesper Barner Lekdorf
Karen M. K. Brandt
Christian Otto Gottlieb
Aksel Paulsen
Peter Ivan Andersen
Joen Steendahl
Jacob Vium Fristed
Fadel Daeb Fadel
Nanett Skjellerup Aarby
Anne Mette Sørensen
Ole Juul
Wjeha Malik
Sylwia Winciorek
Marie Bagger Bohn
Jesper Petersen
Amandus Gustafsson
Tony Kristensen
Dorte Junge Slifsgaard
Carl Leffler
Claus Lindkær Jensen
Magdalene Johansen
Niels Jørgen Thomsen
Ulrik Knudsen

I alt 17 medlemmer har i perioden meldt sig ud, medens 7 medlemmer er afgået ved døden:

Helle Hiorth Lorenzen
Hans Erik Fuglsang Jensen
Hans Emnéus
Hans Henrik Noer
Holger Glastrup
Børge Krebs
Carl Erik Hansen

1.2 DOS's daglige forretninger

Bestyrelsen har igennem det sidste år arbejdet med en fremadrettet justering af hele sekretariatsfunktionen, inklusive kommende arbejdsopgaver for de enkelte bestyrelsesmedlemmer. Samtidig er der iværksat en modernisering af bestyrelsens aktiviteter, justering af foreningens love samt ikke mindst implementering af en ny strategiplan. Det var egentlig meningen at bestyrelsen ville fremlægge den nye strategiplan på generalforsamlingen i år, men vi har ønsket at foreningens medlemmer skal involveres mere i processen, og vi vil derfor via de 9 fagområder i de kommende måneder skabe den rette baggrund for, at vi om et år kan præsentere en strategiplan med maksimal opbakning og realistiske mål for de kommende 5-10 år.

Bestyrelsen har længe været bevist om, at vi ikke på sigt fortsat kan trække på Annette van Hauen som foreningens sekretær. Annette er gået på pension fra sine ansættelser i Acta Orthopaedica og står foran det samme i det offentlige sygehusvæsen. Bestyrelsen har derfor beskrevet, hvad der forventes af et kommende sekretariat, og i den proces har vi "opfundet" titlen sekretariatsleder. I en sådan person ser bestyrelsen en leder der, som sekretær, trækker de store linier i alle aktiviteterne omkring hver enkelt bestyrelsesperson. Vi udfærdigede derfor en funktionsbeskrivelse for en sekretariatsleder, som blev sendt i "høring" rundt i landet. Efterfølgende havde vi to meget kvalificerede ansøgere til samtale, og det var en enig bestyrelse som herefter pegede på Gitte Eggers som DOS' første sekretariatsleder.

Den nye sekretariatsleder skal også fungere som medlemmernes kontakt- og serviceperson i forbindelse med en del af selskabets aktiviteter. Vi har ligeledes lagt afgørende vægt på, at der ved ansættelsen af en

sekretariatsleder skal forekomme en betydelig reduktion af den tiltagende mængde bestyrelsesarbejde hos de enkelte medlemmer, således at bestyrelsen på bedste vis fremadrettet kan varetage medlemmernes interesser.

Gitte Eggers har ydet en meget stor indsats, og er på rekordtid kommet ind i mange af selskabets forretningsgange. Gitte har hurtigt fået fokus på vores vigtige kontakter samt har sammen med Annette sikret en glidende overgang, således at Gitte per 1. november 2010 har det nødvendige overblik til at fortsætte ”alene”.

Vi er i DOS’s bestyrelse taknemmelige over at have haft Annette van Hauen, vores æresmedlem, som en ”rød tråd” for en række bestyrelser igennem mange år. Vi ved, at det vil gøre ondt hos mange af os – og ikke mindst hos Annette selv – når dagen kommer, hvor der ikke længere er daglige forpligtelser. Som æresmedlem er jeg dog sikker på, at Annette vil følge os i fremtiden og holde et skarpt øje med om ”der er orden i tingene”.

1.3 DOS Fonden

Arbejdsgangen med DOS Fonden er løbende blevet justeret igennem de sidste 2-3 år, således at fondens midler sikres en bredere tildeling til især selskabets yngre kolleger. Der er nu nedfældet klare retningslinier for kriterier for tildeling af midler fra fonden – og ja, bestyrelsen er meget konkrete med afslag såfremt disse retningslinier ikke efterleves. Vi ser det som en ære at få tildelt midler fra Fonden – og forventer således også at ansøgerne som minimum sætter sig ind i kravene til at søge fonden – og efterfølgende lever op til disse.

1.4 Ny hjemmeside

I løbet af det sidste år har vi fået en ny hjemmeside. Bestyrelsen vil gerne takke Sundvision ved Torben Uhrenholt samt ikke mindst vores redaktør Steen Lund Jensen for det store arbejde med både at etablere hjemmesiden, og holde den løbende opdateret. Der er nu skabt mulighed for at fagområderne, uden omkostninger, kan få deres egne områder på den nye hjemmeside – et tilbud som flere fagområder allerede har takket ja til. Jeg henviser til Steen Lund Jensens grundige information om hjemmesiden samt dennes mange muligheder i en DOS Bulletin.

1.5 Etiske regler i vores hverdag / samarbejde med industrien

Nævnet for Selvjustits på Lægemiddelområdet er etableret, bl.a. på baggrund af Lægeforeningens initiativ. Der er fokus på etiske regler i samarbejdet med industrien, et fænomen som man især i USA har mærket de sidste par år. Vi må forvente yderligere opstramninger / indskrænkninger i samarbejdsrelationer med industrien i de kommende år. På samme vis har Eucomed udsendt globale retningslinier for hvorledes man forventer at industrien samarbejder med lægerne. Dokumenter vedrørende dette kan findes på vores hjemmeside.

1.6 Yngre ortopædkirurger

Igennem en årrække har der ikke været etableret et officielt forum for Yngre Ortopæder. Nu har en gruppe yngre ortopæder taget initiativ til atter at "vække" dette forum. Bestyrelsen holder deres første møde med gruppen i forbindelse med Årsmødet, og ser frem til at kunne assistere gruppen i deres kommende aktiviteter.

2. Specialeplanlægningen

Specialeplanlægningens fase 1 blev afsluttet i sommeren 2008 med specialets egen Specialerapport og den efterfølgende Specialeudmelding fra Sundhedsstyrelsen. Herefter hørte DOS intet fra Sundhedsstyrelsen frem til vi i starten af februar 2010 – medens vi alle sad på vinterferie forskellige steder i udlandet - blev bekendt med Sundhedsstyrelsens udkast til Specialevejledning af 29. januar 2010. Via telefonsamtaler og mails fik bestyrelsen dog hurtigt et overblik, og der var stor enighed i bestyrelsen om at det foreliggende udkast var milevidt fra de intentioner som Sundhedsstyrelsen selv havde fastholdt i hele processen, nemlig at de sjældne og komplekse indgreb (Regions- og Højt Specialiserede Funktioner) skulle samles på færre enheder, for dermed at sikre et vist patientvolumen, fastholde en høj kvalitet i behandlingen samt sikre forskning, udvikling og uddannelse omkring indgrebet. Bestyrelsen kontaktede straks Dansk Medicinsk Selskab og meddelte vores indtryk, ligesom vi telefonisk kom i forbindelse med vores kontaktperson i Det Rådgivende Udvalg, Professor Henrik Sillesen, Rigshospitalet – som ligeledes blev meddelt vores synspunkter. Herefter fremsendte vi en skrivelse til Sundhedsstyrelsen den 15. februar 2010, hvor vi præciserede vores synspunkter og meddelte, at vi ville fremkomme med yderligere udtalelser

efter møder i Kirurgisk Forum (23. februar 2010) samt med specialets arbejdsgruppe der som bekendt er udpeget af Sundhedsstyrelsen (25. februar 2010). Den 24. februar 2010 skrev DOS sammen med Kirurgisk Forum, som består af de skærende specialer samt Dansk Selskab for Anæstesi og Intensiv Medicin til Sundhedsstyrelsen, ligesom DOS selv fremsendte vores synspunkter i skrivelse af 25. februar 2010. Vi gav udtryk for utilfredshed med at Sundhedsstyrelsen, i modsætning til intentionen, havde spredt de specialiserede indgreb ud på mange afdelinger, og for nogle fagområders vedkommende sågar havde splittet de specialiserede opgaver op og tildelt dem adskilte til forskellige afdelinger. Tilmed havde man placeret nogle af de specialiserede opgaver på en måde så f.eks. den børneortopædiske uddannelse i Hoveduddannelsen i Videreuddannelse Syd nu ikke længere kunne leve op til Sundhedsstyrelsen egne krav som anført i Målbeskrivelsen.

På basis af bl.a. DOS' kritiske kommentarer til det udsendte udkast til Specialevejledning, valgte Sundhedsstyrelsen som det eneste speciale ikke at udsende vores i høring per 1. marts 2010.

Få dage senere kontaktede Sundhedsstyrelsen DOS og anmodede om et møde med repræsentanter for bestyrelsen samt deres tilforordnede (Jes Bruun Lauritzen). På dette møde fremhævede vi atter vores synspunkter og utilfredshed. Sundhedsstyrelsen adspurgte herefter selskabet om vi ville være behjælpelige med at svare på en række spørgsmål, således at en fornyet udgave af Specialvejledningen i større grad ville leve op til de fælles krav vi havde stillet i 2008. Dette tilbud tænkte bestyrelsen over i et par dage, og sagde herefter ja-tak til opgaven, på den betingelse at vi ikke skulle svare på om enkelte sygehus / afdelinger / klinikker kunne varetage de specialiserede opgaver. Det mente vi udelukkende var en opgave for Sundhedsstyrelsen. Derimod ville vi meget gerne komme med faglige kommentarer til, hvad der skulle til for at varetage en specialiseret funktion, i overensstemmelse med de fælles retningslinier der blev lagt sammen med Sundhedsstyrelsen i sommeren 2008. Dette accepterede Sundhedsstyrelsen.

Vi indkaldt herefter Specialarbejdsgruppen og de 9 fagområder til møde i Odense den 18. marts 2010 – og på et daglangt positivt og konstruktivt møde fik vi grundigt endevendt alle hjørner af udkastet. Dette resultere-

de i et digert værk på i alt 14 sider, som vi fremsendte til Sundhedsstyrelsen den 24. marts 2010. I dette værk blev de ovenfor anførte elementer fremhævet i detaljer og med eksempler, ligesom hver enkelt specialiseret indgreb atter blev vurderet og kommenteret.

Sundhedsstyrelsen sendte herefter per 22. juni 2010 vores Specialvejledning i høring, med en høringsfrist til den 27. august 2010. Bestyrelsen gennemgik udkastet, der i betydelig grad var justeret i overensstemmelse med de tidligere fremsendte kritikpunkter. Den 18. august 2010 sendte bestyrelsen vores høringssvar til Sundhedsstyrelsen, hvor vi bemærkede at den justerede udmelding i betydelig grad var ændret i overensstemmelse med intentionerne i Specialeplanlægningen. Det positive i at de Højt Specialiserede Funktioner nu udelukkende er tildelt højest 4 afdelinger i landet blev fremhævet. Det blev kritiseret at der for flere Regionsfunktioner stadigvæk var tildelt flere afdelinger end forventet. Sundhedsstyrelsen blev spurgt om hvorledes man ville sikre at de afdelinger, som var tildelt Regionsfunktioner, modtager et tilstrækkeligt antal patienter, så de kan leve op til Styrelsens egne krav om volumen, antal speciallæger til varetagelse af indgrebet samt forskning, udvikling og uddannelse. Bestyrelsen markerede også i høringssvaret at det bemærkes at der ses en skæv tildeling af Regionsfunktioner på tværs af landet, at vi er opmærksomme på at det kan skyldes lokal-politiske beslutninger, men også at vi undres over at Sundhedsstyrelsen ikke i større grad har sikret at sådanne lokal-politiske elementer ikke må påvirke udviklingen i negativ grad på tværs af landet.
Specialeplanlægningen har været en lang og tidskrævende proces for bestyrelsen. Vi er dog, i lyset af hvad der ”lå på bordet” den 29. januar 2010, særdeles tilfredse med at det er lykkedes os med faglige argumenter at få Sundhedsstyrelsen til at foretage afgørende justeringer. Det er bestyrelsens opfattelse at specialets videre udvikling med den justerede version sikrer den videre forskning, udvikling og ikke mindst uddannelse af kommende kolleger som skal stå for de specialiserede indgreb i fremtiden.

I forbindelse med Specialeplanlægningen anmodede Sundhedsstyrelsen DOS samt Dansk Neurokirurgisk Selskab om at udfærdige fælles retningslinier for kirurgisk behandling af degenerative lidelser i columna cervikalis og torakalis. De to selskaber nedsatte en fælles arbejdsgruppe.

Fra DOS deltog Søren Eiskjær, Ebbe Stender Hansen, Stig Jespersen og Benny Dahl, der samtidig var arbejdsgruppens formand. Lige før sommerferien færdiggjorde arbejdsgruppen deres rapport, som efterfølgende er godkendt i de to bestyrelser. Rapporten er nu sendt til Sundhedsstyrelsen, der har meddelt at man sammen med de to specialer ønsker dette indarbejdet i de endelige specialevejledninger. Dette arbejde forventes således færdiggjort inden Årsmødet i oktober.

Jeg vil her gerne rette en særlig tak til bestyrelsen, specialearbejdsgruppen samt ikke mindst fagområderne for jeres store indsats med at få specialeplanen på plads. Vi står som speciale i dag meget stærkt, en styrke som er vokset ud af det synlige faglige fællesskab vi fik fastlagt overfor myndighederne igennem hele processen, især i den afsluttende fase. Vi kan med sikkerhed bryste os lidt af at have vist handlekraft og dermed fået gennemslagskraft.

3. Fagområder og selskabets struktur og visioner

3.1 Specialets 9 fagområder

I de forløbne sidste 18 måneder har bestyrelsen været meget tæt på vores 9 fagområder, og der er opnået en relation som udvikler sig positivt såvel fagligt som organisatorisk. Fagområderne har været detaljeret involveret i specialeplanlægningen, samt har på vores fællesmøde på januar-seminaret givet os inspiration til opbygningen af de kommende årsmøder. Her er onsdag eftermiddag nu tildelt fagområderne, således de på 5 timer har mulighed for at holde længerevarende symposier o.l.

Bestyrelsen ønsker at involvere fagområderne endnu mere i selskabets videre udvikling, og har derfor taget initiativ til et Kvalitetsudvalg, hvor fagområderne bliver en afgørende deltager.

3.2 Fremtidssikring af Dansk Ortopædisk Selskab

Under denne titel lancerer bestyrelsen på årets generalforsamling et oplæg til reorganisering af selskabets centrale organisation med fremlæggelse af forslag til nye vedtægter. Næste år vil vi som tidligere nævnt fremlægge forslag til strategiplan.

Med den tiltagende mængde af arbejdsopgaver, som løbende tilflyder

selskabets bestyrelse fra officielle organer, sundhedsmyndigheder, andre faglige selskaber samt medlemmerne, traf bestyrelsen allerede for ca. 1½ år siden den beslutning at modernisere vores organisation med henblik på en tilpasning til nutidens krav og forventninger.

Første skridt i den retning blev taget med ansættelse af Gitte Eggers som sekretariatsleder i efteråret 2009. Alle i bestyrelsen er fuldtidsansatte i sygehusvæsenet, og vores arbejdsopgaver for DOS er i det væsentligste foretaget uden for arbejdstiden. Det har derfor været en stor aflastning at få Gitte introduceret og "aktiveret".

Næste skridt har herefter været en nøje gennemgang af de enkelte bestyrelsesmedlemmers ansvars- og arbejdsområder, samt ikke mindst en analyse af hvorledes de tiltagende aktiviteter kunne varetages på fremadrettet vis. Det er på den baggrund at bestyrelsen vil foreslå en markant justering af bestyrelsens sammensætning med etablering af 4 nye bestyrelsesposter samt nedlæggelse af en enkelt. De nye bestyrelsesposter faldt helt naturligt da vi først fik debatten i gang. Vi finder at selskabet har behov for et udvalg, som er ansvarlige for selskabets videnskabelige aktiviteter, bl.a. i forbindelse med årsmødet. På samme vis er der et stigende krav om dokumentation, etablering af kliniske retningslinier og ikke mindst DRG-aktiviteter, så ligeledes her ser vi behov for et bredt udvalg med involvering af alle 9 fagområder. Begge disse udvalg etableres med en formand, som er født medlem af bestyrelsen i DOS. Dertil kommer at formanden for uddannelsesudvalget skal have sit naturlige sæde i bestyrelsen – et forhold som ikke har været tilfældet hidtil. Endelig etableres posten "Past President", hvor selskabets afgående formand er den naturlige kontinuitet i den samlede arbejdsgruppe, samt ikke mindst potentiel kandidat til at indgå i nationale og internationale organer som officiel repræsentant for dansk ortopædi.

I forbindelse med den samlede gennemgang af bestyrelsens aktiviteter har vi vurderet, at den tidligere sekretær-funktion ikke længere har den samme tyngde, hvorfor denne post nedlægges og funktionerne deles ud i bestyrelsen med primære aktiviteter til sekretariatslederen under "Past Presidentens" ansvar.

3.3 Kliniske Retningslinier

Sundhedsstyrelsen har via Dansk Medicinsk Selskab forespurgt alle specialer om der er interesse i at deltage i udarbejdelse af kliniske retningsliner indenfor specialets centrale aktiviteter. Det har vi svaret positivt tilbage på, såfremt der skabes klare forhold over disse retningsliniers omfang, hyppighed for redigering, økonomi samt den nødvendige tid til deres udfærdigelse. Vi har ikke siden hørt fra Sundhedsstyrelsen, men forventer at opgaven "tikker ind" i nærmeste fremtid – og ser opgaven som en af de første for det forventeligt nye Kvalitetsudvalg.

3.4 DOS Bulletin – nu og fremover

Bestyrelsen har besluttet at DOS Bulletinen fra 2012 udelukkende skal udkomme i forbindelse med vores Årsmøde. Men vi vil gerne høre medlemmernes mening herom – og ser gerne debat heraf på generalforsamlingen.

3.5 Uddannelsesudvalget

Formanden for uddannelsesudvalget vil selv fremlægge status, men bestyrelsen vil gerne takke *Niels Wisbech Pedersen, Odense* og hans kolleger i UDDU for deres store indsats i 2009-2010. UDDU er et centralt organ under DOS – og det er også besluttet af bestyrelsen, at såfremt de nye vedtægter godkendes af generalforsamlingen, skal udvalgtes formand være født medlem af DOS´s bestyrelse. Det sikrer en naturlig og sammenhængende arbejdsgang imellem bestyrelse og udvalget.

3.6 DRG udvalget

På samme måde vil bestyrelsen gerne takke *Svend Østgaard* for et ikke alene meget stort, men også særdeles vigtigt arbejde for selskabet på DRG-området. DRG er blevet et økonomisk omdrejningspunkt for såvel de offentlige som de private sygehuse – og det er meget afgørende, at vi i selskabet holder fokus på dette.

4. Relationer til internationale organisationer

4.1 NOF

I maj var DOS vært ved NOF-kongressen, som blev afviklet i Musikhuset i Aarhus med *Kjeld Søballe* som kongrespræsident, *Søren Overgaard* som Scientific Chair, *Michael Ulrich-Winther* som kasserer og selska-

bets formand som bestyrelsens repræsentant i organisationskomiteen. Kongressen blev en meget stor succes med 750 deltagere, et flot videnskabeligt program, en stor og velbesøgt udstilling, samt ikke mindst et flot socialt program. DOS har således på bedste vis lagt grobunden for kommende aktiviteter i NOF, hvor Cody Bünger i Aarhus på NOF-generalforsamlingen blev valgt til foreningens nye præsident, medens Bjarne Møller-Madsen fortætter som generalsekretær. På NOF generalforsamlingen fremlagde foreningens deres nye strategiplan, som vi vil opfordre alle vores medlemmer til at gennemgå. De kan findes på NOF's hjemmeside – og er god som inspirator for vores egen kommende Strategiplan.

4.2 EFORT

I 2011 skal DOS være vært for den 12. EFORT kongres. Kongressen afvikles i Bella Centeret og arbejdet med planlægningen er i fuld gang. På EFORT kongressen i Madrid denne sommer var der ca. 8.000 deltagere. Om der kommer så mange i København må tiden vise, men det bliver suverænt den største opgave for DOS igennem tiderne. DOS har etableret en lokal Organising Committee bestående af bestyrelsen, *Søren Overgaard* og *Klaus Hindsø*. Bestyrelsen håber at rigtig mange af vores medlemmer finder det attraktivt at deltage i mødet som afvikles i dagene omkring Kristi Himmelfartdag (1. til 4. juni 2011), og således ikke belaster produktionen i betydelig grad på landets afdelinger.

I maj måned var DOS vært for *EFORT's Travelling Fellowship*. 14 yngre ortopæder fra hele Europa deltog på én uges besøg rundt på flere af landets afdelinger. Der skal lyde en stor tak til såvel de deltagende afdelinger samt ikke mindst Camilla Ryge – som stod for det organisatoriske arbejde med besøgene. Vi fik stor ros fra fellows samt ligeledes fra EFORT. I efteråret 2009 deltog Lena Schroll som *Travelling Fellow* i Italien. Der kan læses mere herom i sidste nummer af DOS Bulletin.

Afslutning

Dette var så min anden og sidste formandsberetningen for DOS. Det har været 2½ spændende år i formandsstolen – men også 2½ år med mange og tidskrævende opgaver. Jeg vil gerne takke selskabets medlemmer for jeres tillid til valget af mig som jeres formand, og håber jeg har levet op

til jeres forventninger. Jeg vil samtidig takke mine bestyrelseskolleger igennem de 2½ år for jeres energiske indsats. Uden jer havde de markante forandringer, vi har skabt i perioden, ikke været mulig.

En særlig tak skal der dog være til mine kolleger i sektoren hjemme i Vejle for jeres velvillige støtte til mine aktiviteter i DOS, samt ikke mindst afdelings- og sygehusledelsen, der uden tøven har givet mig den nødvendige frihed til at varetage formandshvervet.

Per Kjærsgaard-Andersen

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Uddannelsesudvalget: Formandens skriftlige beretning

Dansk Ortopædisk Selskab, 28. oktober 2010

Ved forårsmødet 2009 i Odense sagde uddannelsesudvalget farvel til Finn Bjarke Christensen, som har været medlem af UDDU siden 2004/5, senest som formand. Tak til Finn for en stor indsats. Michael Brix blev herefter ordinært medlem af udvalget og Henrik Palm indtrådte som ny hoveduddannelsesrepræsentant. UDDU har herefter denne sammensætning:

Niels Wisbech Pedersen:	Formand og ansvarlig for UEMS/EBOT/CME. Fase IV
Thomas Lind:	E-kurser, Målbeskrivelse for I- og HU-stilling. Fase IV
Inge Togo:	Hjemmeside og rekruttering
Michael Brix:	Symposier, specialespecifikke kurser og inspektorordningen
Henrik Palm:	Sekretær og workshops
Per Wagner Kristensen:	Hovedkursusleder.

Som noget nyt er Per Pallesen, Søren Kold og Hans RI Jørgensen som PKL/PUF knyttet tættere til UDDU og deltager i 2 møder årligt. Udvalgets formand deltager fast i alle DOS bestyrelsesmøder, og UDDU har fællesmøde med bestyrelsen i DOS 2 gange årligt, den ene gang er i forbindelse med det årlige internatmøde, hvor også alle fagområderne er repræsenteret.

De specialespecifikke kurser varetages med stor dygtighed af en række delkursusledere udpeget af fagområderne. UDDU vil gerne takke de afgåede delkursusledere (Lis Barfred, Jens Ole Søjbjerg, Johnny Keller) for en flot kursusrække og de nuværende delkursuslederne ved årets kurser for endnu en stor indsats:

Rygkirurgi:	Ebbe Stender Hansen
Hofte- og knækirurgi:	Søren Overgaaard
Håndkirurgi:	Pernille Leicht
Tumor og infektionskirurgi:	Gunnar Schwarz Lausten
Færdighedskursus:	Kristian Høj
Børneortopædi:	Søren Harving
Statistik og forskningsmetodologi:	Jens Lauritsen
Fod- og ankel kirurgi:	Johnny Frøkjær
Traumatologi:	Henrik Grønborg
Skulder- og albuekirurgi:	Anne Katrine B. Sørensen
	Bo Sanderhoff Olsen
Idrætstraumatologi:	Peter Faunø

UDDU har haft et aktivt år med stor mødeaktivitet. Mødereferater kan læses på hjemmesiden.

Målbeskrivelser for fase II, III og IV

Der er foretaget en tiltrængt revision af målbeskrivelsen for I-uddannelsen. I øjeblikket pågår en revision af hoveduddannelsen. Vi står i et vadested, når det gælder bemandingen og ledelsen af skadestuerne. Relevansen af kompetencer, som i øjeblikket erhverves i skadestuen, må vurderes. Er arbejdet i skadestuen en nødvendig del af ortopædkirurgens opdragelse? I givet fald skal vi finde en løsning på, hvordan disse kompetencer erhverves fremover, hvor arbejdet i skadestuen ikke er en naturlig del af arbejdet i den ortopædkirurgiske afdeling, men hører under et fælles akut afsnit, måske med en medicinsk eller anæstesiologisk ledelse.

De ortopædkirurgiske afdelinger bliver mere specialiserede, og det bliver tiltagende svært at få alle kompetencer erhvervet på et eller få steder. Der kan blive behov for mere individuelt tilpassede uddannelsesforløb med placering flere steder end tidligere, herunder den private sektor. Disse overvejelser er af stor betydning for målbeskrivelsen for Intro- og Hoveduddannelsen. Der vil utvivlsomt blive behov for yderligere revisioner i takt med realiseringen af den mange strukturændringer, der pågår for tiden.

Fase IV uddannelsen, dvs. indholdet i uddannelsen som fører til en slutstilling indenfor et fagområde, har meget høj prioritet for UDDU.
Efter internatmødet i januar 2010 fik UDDU mandat til at lave en "*Vejledning til beskrivelse af specialistuddannelse indenfor fagområderne*". En vejledende målbeskrivelse, som afgrænser en kompetencestyret uddannelse indenfor de enkelte fagområder, er det tredje trin i uddannelsen mod at blive ansat som specialist indenfor et fagområde. En sådan målbeskrivelse skal tage hensyn til specialeplanens 3 funktionsniveauer (hovedfunktion, regionsfunktion og højt specialiseret funktion).

Målbeskrivelserne har en række formål:

- Uddannelsessøgende kan med målbeskrivelsen i hånden stille krav til sin fase IV uddannelse.
- Ansøgeren til en overlægestilling ved, hvilke kompetencer der forventes indenfor et givet fagområde på et givet niveau.
- Afdelingerne inspireres til at tilrettelægge uddannelsesforløb, hvis indhold bidrager til uddannelse på fase IV niveau, stillingsopslag og den faglige bedømmelse opkvalificeres.

Vejledningen bliver præsenteret for fagområderne i løbet af efteråret, så en ny målbeskrivelse for fase IV kan foreligge i 2011. UDDU er bevidst om, at der sideløbende hermed må arbejdes på mange fronter for at forsøge at tilpasse stillingsmassen, så de afspejler uddannelsesbehovet.

Rekruttering
En af UDDU's fornemmeste opgaver er at styrke rekrutteringen til vores speciale. Vi har i årrække stået for work-shops for de yngste kolleger.

Da der fra 2010 ikke længere arrangeres DOS forårsmøde, introducerede vi i april 2010 en uddannelsesdag. Det var et velbesøgt arrangement bestående af en fælles formiddag for interesserede medicinstuderende, basis- og introduktionslæger og ældre "uddannelsesgivende" kollegaer. Det overordnede emne var rekruttering. Eftermiddagen blev brugt til work-shops for de yngste, som de kendes fra DOS-møderne, og diskussion af en række uddannelsesforhold for uddannelsesansvarlige, vejledere m.v. Vi forventer at dette arrangement bliver en tilbagevendende uddannelsesorienteret begivenhed, og at det fremover vil lykkes at få flere afdelinger repræsenteret blandt de ældre uddannelsesinteresserede ortopæder.

UDDU var også engageret i work-shops indenfor hoftenære frakturer og brug af fleksible intramedullære marvsøm til børnefrakturer ved NOF mødet i Århus. Vi har desuden sikret at ortopædkirurgien bliver præsenteret ved de 3 lægeskolers arrangementer om specialevalg.
Ansøgerskaren til HU-stillingerne er øget, og niveauet er højnet, men vores fag har stadig et problem, når det gælder rekruttering af kvinder.

UDDU deltager i ansættelsesprocedurerne ved besættelse af HU stillinger i alle 3 uddannelsesregioner og er dermed medvirkende til at sikre en national ensartethed.

Specialespecifikke kurser
Kursustildelingen og praktiske forhold omkring afviklingen af kurserne forestås med fast og kyndig hånd af hovedkursusleder Per Wagner Kristensen. Afviklingen foregår gnidningsfrit, og kursisterne får afsluttet kursusrækken planmæssigt. UDDU har forsøgt at stramme op for at sikre at kursisterne deltager i fuldt omfang og at et udbyttet af kurserne kan dokumenteres. Der er derfor indført en obligatorisk posttest, hvor deltagerne skal løse en række multiple choice opgaver, som er besvaret under kurset. Er besvarelsen ikke tilfredsstillende, orienteres uddannelsesstedet om resultatet, og forventes at sikre, at den manglende faglige viden erhverves.

Målbeskrivelse for udenlandske læger med dokumenteret speciallægeuddannelse

I lyset af de noget uheldige eksempler på manglende uddannelse/ autorisation blandt enkelte læger fra ikke EU-lande bad Sundhedsstyrelsen om at få udarbejdet en målbeskrivelse for en 6 måneders prøveansættelse af udenlandske læger med dokumenteret speciallægeuddannelse. UDDU har med udgangspunkt i HU's målbeskrivelse udarbejdet en målbeskrivelse, som fordrer kompetence af både praktisk og teoretisk karakter. En sådan uddannelse vil være et kompromis i forhold til den regelrette HU, men gennem deltagelse i arbejdet har DOS fået indflydelse på indholdet i uddannelsen. Det samme kan desværre ikke siges om den model for forhåndsgodkendelser af ansættelser i konflikt- og krigsområder som del af den ortopædiske speciallægeuddannelse. Her er et forslag fra Sundhedsstyrelsen sendt i høring i de regionale uddannelsesråd udenom DOS/UDDU.

Hjemmesiden

UDDU har lavet et stort arbejde for at opdatere indholdet i uddannelsesdelen af DOS nye hjemmeside *www.ortopaedi.dk*. Her findes blandt meget andet karrierevejledning og specialevalg, ansættelsesprocedurer til I- og HU stillinger, oplysninger om kurser og workshops. Vi tager gerne imod forslag til indholdet på vores del af hjemmsiden.

På sigt er planen at få lagt links til flere kurser, og medlemmer som har været på kurser af relevans for ortopæder under uddannelse bedes fremsende materiale.

UEMS/EBOT
Udvalgets formand har deltaget i 3 europæiske møder. Møderne har haft varieret indhold med hovedvægten på emner om europæisk uddannelse, herunder EBOT eksamen. Det har været workshop om ”Training of the Trainer” og ”Curriculum Development”, og selvom vi på mange områder er godt med, når det gælder beskrivelse af den formaliserede uddannelse, er der meget vi kan lære af vores europæiske kollegaer. Fra Danmark har vi haft indlæg om uddannelse i det private og rekruttering af læger til specialet. Desuden har vi medvirket til flere spørgeskemaundersøgelser bl.a. om lægeskolernes uddannelse indenfor ortopædkirurgi og udbuddet af ortopædkirurgiske speciallæger i medlemslandene. Visse fagområder er på et europæisk plan i en konkurrencesituation i forhold til andre specialer; det gælder traumatologi herunder børnetraumatologi, rygkirurgi og håndkirurgi.

Symposier ved DOS årsmøde
UDDU er ansvarlig for afholdelse af et eller flere symposier ved DOS´ årsmøde. Der vil fremover være afsat 4 timer til symposier på mødets første dag. Emner i år er ”Periprostetiske frakturer” og symposiet arrangeres af Dansk Traumatologisk Selskab og Dansk Selskab for Hofte- og Knæalloplastik. Næste års symposium forventes at blive arrangeret af Selskab for ortopædisk onkologi. UDDU fordeler symposierne blandt fagområderne.

For DOS bestyrelsen, UDDU og ikke mindst Fagområderne venter der en helt afgørende udfordring vedrørende videreuddannelsen af speciallæger. Skal arbejdet bære frugt kræver det, at flest muligt deltager i debatten i fagområderne om indholdet i uddannelsen og efterfølgende, at vi alle tager et medansvar for at anbefalingerne implementeres og respekteres.

Niels Wisbech Pedersen

Forslag til ændring af love for Dansk Ortopædisk Selskab

Generalforsamlingen, torsdag d. 28. oktober 2010

Gældende love	Ændringsforslag til gældende love *(ændringer er anført med kursiv)*
§	
1: Dansk Ortopædisk Selskab har til formål: - at fremme ortopædkirurgisk videnskabeligt arbejde og samarbejde så vel nationalt som internationalt. - at fremme dansk ortopædkirurgisk uddannelse. - at fremme dansk ortopædkirurgisk virksomhed ved et nært samarbejde med andre videnskabelige selskaber. - at fremme ortopædkirurgisk forskning, uddannelse og efteruddannelse ved at yde økonomisk støtte hertil efter indstilling fra bestyrelsen.	**Uændret**
§2: Efter skriftlig anmodning til bestyrelsen kan denne som 1. ordinære medlemmer optage: - læger med dansk autorisation. Ordinære medlemmer, der fratræder deres stilling eller bliver 67 år, fritages for kontingent, men bevarer stemmeretten.	**Uændret**

2. ekstraordinære medlemmer uden stemmeret optage:
- andre videnskabelige og tekniske medarbejdere med akademiske kvalifikationer svarende til den lægevidenskabelige embedseksamen, hvis arbejde har relation til ortopædisk kirurgi, og som ved deres virksomhed medvirker til fremme af Selskabets formål.
Ekstraordinære medlemmer, som overgår til pension, fritages for kontingent.

§3:
Æresmedlemmer kan udnævnes ved generalforsamlingens beslutning med 2/3 majoritet efter motiveret indstilling af bestyrelsen. Æresmedlemmer har kun stemmeret for så vidt de opfylder betingelserne for ordinært medlemskab.
Æresmedlemmer er fritaget for kontingent.

Uændret

§4:
Som udmeldt betragtes den, som ikke trods påkrav har betalt kontingent i 2 år.
Genoptagelse kan kun ske efter betaling af restancen.
Et medlem kan ekskluderes ved generalforsamlingsbeslutning med 2/3 majoritet efter motiveret indstilling fra bestyrelsen.

Uændret

§5:
Bestyrelsen består af formand, næstformand, sekretær, kasserer og redaktør for Selskabets medlemsorgan.
Bestyrelsesmedlemmer vælges af generalforsamlingen. Forslag til valg af bestyrelsesmedlemmer skal være formanden i hænde senest 48 timer før generalforsamlingens begyndelse.
Mindst 3 af bestyrelsens medlemmer skal være speciallæger i ortopædisk kirurgi. Redaktøren skal være yngre læge under uddannelse indenfor specialet på valgtidspunktet og repræsenterer samtidig bestyrelsen i uddannelsesudvalget. Formand og næstformand vælges for 2 år.
Umiddelbart genvalg til samme embede kan ikke finde sted.
Sekretær og kasserer vælges for 3 år og kan genvælges for yderligere een periode.
Redaktøren vælges for 2 år og kan genvælges for yderligere 2 perioder.
Ved vakance i en valgperiode vælges på førstkommende generalforsamling nyt bestyrelsesmedlem for resten af perioden.
En sådan valgperiode præjudicerer ikke ordinær valgbarhed i henhold til loven.
Pensionerede medlemmer kan ikke vælges til Selskabets bestyrelse.

§5:
Bestyrelsen består af formand, næstformand, afgående formand, kasserer, redaktør for Selskabets medlemsorgan, formand for uddannelsesudvalget, formand for det videnskabelige udvalg samt formand for kvalitetsudvalget.
Bestyrelsesmedlemmer vælges af generalforsamlingen. Forslag til valg af bestyrelsesmedlemmer skal være formanden i hænde senest 48 timer før generalforsamlingens begyndelse.
Mindst ét af bestyrelsens medlemmer skal være yngre læge på valgtidspunktet. Formand og næstformand vælges for 2 år.
Umiddelbart genvalg til samme bestyrelsespost kan ikke finde ste*d. Når der vælges ny formand, indtager den tidligere formand posten som afgående formand. Der kan derfor ikke foretages valg til denne post. De øvrige bestyrelsesmedlemmer vælges for 3 år og kan genvælges for yderligere een periode. Afgående formand udgår af bestyrelsen efter 2 år.*
Ved vakance i en valgperiode vælges på førstkommende generalforsamling nyt bestyrelsesmedlem for resten af perioden. En sådan valgperiode præjudicerer ikke ordinær valgbarhed i henhold til Selskabets love.

Pensionerede medlemmer kan ikke vælges til Selskabets bestyrelse

§6:
Bestyrelsen tegner selskabet og leder dets daglige forretninger. Alle udvalg i selskabet refererer til bestyrelsen og kan ikke, bortset fra områder der af bestyrelsen er delegeret til udvalgene, tegne selskabet. Udvalgene kan derfor ikke uden bestyrelsens samtykke agere i forhold til samarbejdspartnere, offentlige myndigheder m.v.
Beslutninger i bestyrelsen træffes ved afstemning, ved stemmelighed er formandens stemme afgørende.
Bestyrelsen kan nedsætte andre udvalg til afgrænsede opgaver. Bestyrelsen vælger udvalgets formand og afgør, hvorvidt et bestyrelsesmedlem skal være medlem af udvalget.
Bestyrelsen kan udpege medlemmer af selskabet til at repræsentere selskabet i udvalg, råd, kommissioner m.v.. Disse repræsenterer selskabet, og kan ikke uden bestyrelsens accept på selskabets vegne indgå aftaler, deltage i udtalelser, medvirke ved udgivelse af rapporter m.v. De udpegede skal én gang årligt give en kort rapport til bestyrelsen om udvikling m.v. i det arbejde, hvor

§6:
Rejser, som bestyrelsesmedlemmer og udvalgsmedlemmer foretager på Selskabets vegne, betales efter DADL's regler.

§7:
Generalforsamlingen er Selskabets højeste myndighed.
Ordinær generalforsamling afholdes 1 gang om året ved bestyrelsens foranstaltning.
Meddelelse om tid og sted samt dagsorden skal tilstilles medlemmerne senest 14 dage forud for mødet.
Bestyrelsen kan - når den anser det for fornødent - indkalde til ekstraordinær generalforsamling, og den er pligtig til at gøre det, når 1/3 af medlemmerne indgiver skriftlig begæring herom. Indvarsling sker som til ordinær generalforsamling. Dog kan bestyrelsen, når særlige forhold gør det ønskeligt, indkalde til ekstraordinær generalforsamling med kortere varsel.

§8:
På generalforsamlingen vælges en dirigent som leder af forhandlingerne. Generalforsamlingen er altid beslutningsdygtig, men den kan kun tage beslutning om

de er udpegede som repræsentanter for selskabet.

§7:
Rejser, som bestyrelsesmedlemmer og udvalgsmedlemmer foretager på Selskabets vegne, betales efter DADL's regler.

§8:
Generalforsamlingen er Selskabets højeste myndighed.
Ordinær generalforsamling afholdes 1 gang om året ved bestyrelsens foranstaltning.
Meddelelse om tid og sted samt dagsorden skal tilstilles medlemmerne senest 14 dage forud for mødet.
Bestyrelsen kan - når den anser det for fornødent - indkalde til ekstraordinær generalforsamling, og den er pligtig til at gøre det, når 1/3 af medlemmerne indgiver skriftlig begæring herom. Indvarsling sker som til ordinær generalforsamling. Dog kan bestyrelsen, når særlige forhold gør det ønskeligt, indkalde til ekstraordinær generalforsamling med kortere varsel.

§9:
På generalforsamlingen vælges en dirigent som leder af forhandlingerne. Generalforsamlingen er altid beslutningsdygtig, men den kan kun tage beslutning om

sager, som er optaget på den udsendte dagsorden.
Til beslutning om lovændringer kræves 2/3 majoritet blandt de tilstedeværende medlemmer. Dog skal sådanne forslag sendes til urafstemning, når blot 25 af generalforsamlingen forlanger det.

§9:
Kontingentet fastsættes på generalforsamlingen, hvor regnskabet forelægges til godkendelse. Regnskabet skal forud for generalforsamlingen være gennemset af den lægelige revisor og være godkendt af en statsautoriseret revisor. Den lægelige revisor vælges for 4 år. Genvalg kan finde sted én gang.

§10:
Selskabet afholder mindst et årligt møde.

§11:
Dansk Ortopædisk Selskab er medlem af Dansk Medicinsk Selskab og repræsenteres her af formanden samt udpeget af bestyrelsen det antal repræsentanter, som medlemstallet berettiger til.
Dansk Ortopædisk Selskab er medlem af "The European Federation of National Associations of Orthopaedics and Traumatology", og repræsenteres her af 2 delega-

sager, som er optaget på den udsendte dagsorden.
Til beslutning om lovændringer kræves 2/3 majoritet blandt de tilstedeværende medlemmer. Dog skal sådanne forslag sendes til urafstemning, når blot 25 af generalforsamlingen forlanger det

§10:
Kontingentet fastsættes på generalforsamlingen, hvor regnskabet forelægges til godkendelse. Regnskabet skal forud for generalforsamlingen være gennemset af den lægelige revisor og være godkendt af en statsautoriseret revisor. Den lægelige revisor vælges for 4 år. Genvalg kan finde sted én gang.

§11:
Selskabet afholder mindst et årligt møde.

§12:
Dansk Ortopædisk Selskab er medlem af Dansk Medicinsk Selskab og repræsenteres her af formanden samt udpeget af bestyrelsen det antal repræsentanter, som medlemstallet berettiger til.
Dansk Ortopædisk Selskab er medlem af *EFORT (The European Federation of National Associations of Orthopaedics and Traumatology), og repræsenteres*

ter udpeget af bestyrelsen.
Dansk Ortopædisk Selskab er medlem af føderationen Nordisk Ortopædisk Forening og repræsenteres i dennes bestyrelse af formanden.

§12
Generalforsamlingen vælger et uddannelsesudvalg. Udvalgets opgave er planlægning og koordinering af Selskabets uddannelses- og kursusvirksomhed samt at vejlede bestyrelsen i sager af uddannelsesmæssig karakter.
Udvalget består af formand og 5 medlemmer. Udvalget vælger formanden af sin midte.
Mindst ét bestyrelsesmedlem, redaktøren af selskabets medlemsorgan, skal være medlem af udvalget.
Ét udvalgsmedlem vælges ved skriftlig afstemning af læger ansat i ortopædkirurgisk hoveduddannelsesstilling. Medlemmet, der skal være medlem af Dansk Ortopædisk Selskab, vælges for 2 år og skal på valgtidspunktet være ansat i en hoveduddannelsesstilling.
De 4 øvrige medlemmer af udvalget vælges for 3 år. Genvalg kan finde sted én gang. Ét af disse udvalgsmedlemmer skal på valgtidspunktet være ansat i en hoveduddannelsesstilling.

her af formanden og den afgående formand.
Dansk Ortopædisk Selskab er medlem af *NOF (Nordisk Ortopædisk Forening)* og repræsenteres i dennes bestyrelse af formanden

§13:
Stk. 1,
Uddannelsesudvalg
Generalforsamlingen vælger et uddannelsesudvalg. Udvalgets opgave er planlægning og koordinering af Selskabets uddannelses- og kursusvirksomhed samt at vejlede bestyrelsen i sager af uddannelsesmæssig karakter.
Udvalget består af formand og 5 medlemmer. *Udvalgets formand er medlem af bestyrelsen og vælges af generalforsamlingen j.f. § 5.*
Ét udvalgsmedlem vælges ved skriftlig afstemning af læger ansat i ortopædkirurgisk hoveduddannelsesstilling. Medlemmet, der skal være medlem af Dansk Ortopædisk Selskab, vælges for 2 år og skal på valgtidspunktet være ansat i en hoveduddannelsesstilling.
De 4 øvrige medlemmer af udvalget vælges for 3 år. Genvalg kan finde sted én gang. Ét af disse udvalgsmedlemmer skal på valgtidspunktet *være yngre læge*.
Forslag til valg af medlemmer af

Forslag til valg af medlemmer af uddannelsesudvalget skal være Selskabets formand i hænde senest 48 timer før den årlige generalforsamling.

uddannelsesudvalget skal være Selskabets formand i hænde senest 48 timer før den årlige generalforsamling.

Stk. 2,
Videnskabeligt udvalg
Generalforsamlingen vælger et videnskabeligt udvalg. Udvalgets opgave er at sikre og udvikle selskabets videnskabelige aktiviteter, herunder efter aftale med bestyrelsen at planlægge selskabets videnskabelige møder. Udvalget udarbejder indstilling til bestyrelsen om modtagere fra DOS Fonden samt vedligeholder oversigt over danske ortopædkirurgiske publikationer, herunder videnskabelige afhandlinger på selskabets hjemmeside. Udvalget består af formand og 4 medlemmer, herunder selskabets redaktør, der er medlem af udvalget. Udvalgets formand er medlem af bestyrelsen og vælges af generalforsamlingen j.f. § 5.
De 3 øvrige medlemmer af udvalget vælges for 3 år. Genvalg kan finde sted én gang. Ét af disse udvalgsmedlemmer skal på valgtidspunktet være yngre læge.
Forslag til valg af medlemmer af det videnskabelige udvalg skal være Selskabets formand i hænde senest 48 timer før den årlige generalforsamling.

Stk. 3,
Kvalitetsudvalg
Udvalgets opgave er at sikre at videnskabelig viden implementeres den daglige kliniske praksis. Udvalget er ansvarlig for at udvikle og vedligeholde kliniske vejledninger, referenceprogrammer m.v. Udvalget skal sikre koordinering og erfaringsudveksling mellem fagområderne inden for det ortopædkirurgiske speciale og mellem de kliniske databaser inden for specialet, ligesom udvalget efter aftale med bestyrelsen kan tage initiativ til samarbejde med aktører inden for kvalitetsområdet, herunder patientorganisationer.
Udvalget består af formand og 9 medlemmer. Udvalgets formand er medlem af bestyrelsen og vælges af generalforsamlingen j.f. § 5. .
Bestyrelserne for de enkelte fagområdeselskaber udpeger hver ét medlem til udvalget. Medlemmerne har en funktionstid på 3 år og kan genudpeges én gang. Ved udpegelsen skal det i videst muligt omfang sikres, at medlemmerne også kan repræsentere databaserne inden for fagområdet.

§13
Dansk Ortopædisk Selskab deltager i den centrale vurdering af

§ 14:
Dansk Ortopædisk Selskab deltager i den decentrale vurdering af

ansøgere til hoveduddannelsesstillingerne i ortopædisk kirurgi. Vurderingsudvalget er nedsat af Danske Regioner og næstformanden deltager i vurderingsudvalget.
Vurderingsudvalget indstiller derefter ansøgerne til ansættelse i regionerne og videre behandling i de lokale ansættelsesudvalg.

ansøgere til hoveduddannelsesstillingerne i ortopædisk kirurgi. *Hovedkursuslederen har plads i alle tre uddannelsessekretariaters ansættelsesudvalg. Dansk Ortopædisk Selskab udpeger desuden mindst 2 deltagere til hvert ansættelsesudvalg i uddannelsesregionerne.*

§14
Bestyrelsen kan nedsætte andre udvalg til afgrænsede opgaver. Bestyrelsen udvælger formand og afgør, hvorvidt et bestyrelsesmedlem skal være medlem af udvalget

Nuværende § 14 udgår og erstattes af ny tekst i § 6

§15:
Til Sundhedsstyrelsens tilforordnede i faglige spørgsmål og vurdering, udpeger generalforsamlingen 2 repræsentanter, der selv udpeger sin personlige suppleant. Funktionsperioden er 4 år med mulighed for forlængelse en periode.

§ 15 udgår, der udpeges ikke længere tilforordnede til Sundhedsstyrelsen

§16:
Udmeldelse kan kun ske skriftligt til bestyrelsen med virkning ved udgangen af regnskabsåret.

§15:
Udmeldelse kan kun ske skriftligt til bestyrelsen med virkning ved udgangen af regnskabsåret.

§17:
Dansk Ortopædisk Selskab kan opløses, når 2/3 af medlemmerne skriftligt udtaler ønske herom.

§16:
Dansk Ortopædisk Selskab kan opløses, når 2/3 af medlemmerne skriftligt udtaler ønske herom.

Beslutningen skal dog bekræftes på en følgende, normalt indvarslet generalforsamling med 2/3 majoritet . Opløses Selskabet, beslutter den opløsende generalforsamling om anvendelsen af de tilstedeværende værdier.
Overgangsbestemmelser:
De foretagne lovændringer har gyldighed fra vedtagelsen.

Beslutningen skal dog bekræftes på en følgende, normalt indvarslet generalforsamling med 2/3 majoritet . Opløses Selskabet, beslutter den opløsende generalforsamling om anvendelsen af de tilstedeværende værdier.
Overgangsbestemmelser:
De foretagne lovændringer har gyldighed fra vedtagelsen.

Bestyrelsen

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ABSTRACTS

UNICAP® focal knee operations – Who are these for?

J. O. Laursen
Orthopedic Department, County Hospital Soenderborg

Background: Introduction: In 2003, a new type of knee hemi-prosthesis was introduced in USA and Europe. HemiCAP was primary developed for articular cartilage lesions in knee, toe, shoulder and hips. In 2006, it was introduced to the Danish market (distributed by Ortotech). By then there was clinical follow up in USA and Europe at 3 years in around 5.000 patients, and the results were promising. 4 years later, the UNICAP was introduced for more advanced cartilage lesions om both femoral and tibial side. Over the years if you deal with surgery of the knee - arthroscopies or total knee replacements- you have seen many patients with minor cartilage lesions and perhaps have tried to inforate, transplant cartilage or utilize chondrocyte transplantation with more or less success. I introduced this implant in 2009, and have so far implanted 45 of these, just using the femoral part!

Purpose: Follow-up kohorte study of a new implant concerning focal cartilage lesions in the knee- joint.

Methods: Material and methods: There was a protocol for the operations: all patients had preoperative x-rays and MRI taken and all operations started with arthroscopy to confirm the cartilage damage was suitable for further UNICAP surgery and to deal with other damage to meniscus or cartilage. All operations were done with spinal or GA. PC preoperatively and using a tourniquet. Midincision –miniarthrotomy. Postoperative full weight-bearing and range of motion. Discharge 1-3 day postoperatively and controlled by x-rays postop. At 6, 12 weeks and 1 and 2 years including clinically controls with assessing of KSS. All patients were registered in the Danish Knee Society register. VAS – score was registered preoperatively and at follow-ups including KSS, complications and revisions.

Findings: 11 women and 12 men is operated till now, with mean age men: 57 years (40-65); women 62 years (40 – 83). 15 performed in spinal anesthesia and 8 in GA. Operating time (knife time) were average 45 minutes (35 – 80 minutes) including arthroscopy and the UNICAP operation. 12 of the patients were still at work – but had been out of work for an average of 6 months. 7 women and four men were retired. All the workers were at work again in average of 6 months (2 – 12 months). The hospital stay was on average 3 days (2 – 4 days). There were seen no pre- or postoperative complications and no deep infections.One patient had the UNICAP revised to a TKA 6 month's later. 15 ptt. had more than 3 months follow up and among these, 11 hand meniscus lesions – 11 medial and 3 lateral lesion. KSS knee and functional scores were preoperatively at 56 (30-60) and 38 (30- 70) respectively. And at controls (>12 weeks) at 91 (50-95) and 81 (30-90)(fig 1). VAS-score were preoperatively at 7 (6-8) and at control (> 12 weeks) at 2 (1-7). Painkillers were reduced from (1, 2, and 3) to (1, 2) or less. Untill now 45 patients are operated, 27 have passed 3 month's control and 15 one year. 2 patients are revised to a TKA because of progressing arthrosis.

Conclusion: So far I have found the UNICAP promishing for restoration of the medial chamber of the knee in patients with isolated focal cartilage lesions or onechamber arthrosis. Further study and follow-ups are nessesary to confirm this.

Fast-track bilateral total knee arthroplasty

Henrik Husted, Anders Troelsen, Kristian Stahl Otte,
Billy B Kristensen, Gitte Holm, Henrik Kehlet
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Background: Bilateral simultaneous total knee arthroplasty (BSTKA) is often found to be associated with increased morbidity and mortality. Fast-track surgery (ANORAK-HH) has reduced length of stay (LOS) for unilateral total knee arthroplasty, with high patient satisfaction and few readmissions.
Purpose: Fast-track surgery may therefore also influence the potentially increased morbidity and mortality associated with the bilateral simultaneous procedure.
Methods: Inclusion criteria were symptomatic bilateral arthritis and consent to BSTKA. Patients were not considered for the bilateral procedure if they had a history of or objective findings indicating cardiopulmonary disease. 150 patients (300 TKAs) were included, 87 were female. For comparison, a group of unilaterally TKA operated patients were found by registering data on the preceding and following patient matched for gender (but not for age) operated nearest on the index operation (BSTKA). Patients were subsequently excluded from comparative analysis if they were operated with TKA in the contra lateral knee (= staged bilateral TKA) during the study period. 271 patients thus registered as a control group, 160 were female. Patients were followed for a mean of 23.6 moths (SD 16.9) and a variety of parameters on outcome were analyzed and compared.
Findings: Apart from staying longer (mean 4.7 days vs. 3.3 days) and using more blood transfusions (45.6% vs. 12.1%); the outcome at 3 months and 2 years follow- up was identical or better in the bilateral group regarding morbidity (complications), mortality, satisfaction, range of motion, pain, use of walking aids, ability to return to work and ability to perform activities of daily living.
Conclusion: Bilateral simultaneous total knee arthroplasty can be performed in selected patients in a fast-track set-up with results comparable to or better than unilateral total knee arthroplasty.

Does Overweight and Obesity Influence the clinical Outcome and the Quality of life at five years following primary total knee replacement?

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Background: In Denmark there are annually performed 7-8000 primary total knee replacements and there seems in all countries, to be a rapid increase in the number of knee replacements. The associations between obesity and outcomes following total knee replacement are ambiguous.

Purpose: The purpose of this study were to investigate whether there is an association between the preoperative body mass index in total knee replacement patients and the effect three to five years postoperative.

Methods: 197 patients who had undergone primary total knee replacement in the period 1.1.2005-31.12.2006 participated in a three-five years of follow-up study. Outcome measures were self-rated health (SF-36), which consists of eight strands and two component scores, physical component score and mental component scores and the Knee Society rating system (KSS) (knee score and function scores), and improvement of the two KSS scores from baseline to follow-up.

Findings: Whit Ordinal logistic regression (adjusted for gender, age, basic disease and surgical procedure) were found statistically significant association between body mass index and nine of the fourteen outcome measures. For all outcome measures were found OR > 1. With a difference in body mass index of 1kg/m2 increases the risk of lower scores from a minimum of 2% OR 1.02 (0.97-1.07) p = 0.5 (mental component score) to maximum 14% OR 1.14 (1.08-1.21) p <0.001 (KSS function score). With a difference in body mass index on 5kg/m2 increases the risk of lower scores from a minimum of 9% OR 1.09 (mental components scores) to a maximum of 96% OR 1.96 (KSS function scores). With a difference in body mass index of 10kg/m2 rises risk of worse score with minimum 19% OR 1.19 (mental component score) to a maximum of 284% OR 3.84 (KSS function score).

Conclusion: There is a clear association between body mass index and efficacy 3-5 years following primary total knee replacement. More than half of the Outcome measures were statistically significant. High body mass index increases the risk of poor outcome after total knee Arthroplasty.

Risk for revision among total hip arthroplasty patients with dia-betes mellitus in Denmark

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Background: As a consequence of the rising prevalence of diabetes worldwide, an increasing proportion of diabetic THR patients may be expected in coming years. Diabetes research on postoperative complications among arthroplasty patients is limited.
Purpose: We evaluated the extent to which diabetes affect the revision rate due to aseptic loosening, deep infection and dislocation following total hip arthroplasty (THA).
Methods: We used the Danish Hip Arthroplasty Registry (DHR) to identify all primary THR patients operated on during the period from 1 January 1996 to 31 December 2005. The presence of diabetes among THA patients was identified by using The Danish National Registry of Patients and The Danish National Drug Prescription Database. We used Poisson regression analyses, to estimate relative risk (RR) and 95% Confidence Interval (CI) for patients with diabetes compared to patients without diabetes, both crude and adjusted for potentially confounding factors.
Findings: We identified 57 575 first primary THR patients in DHR, of which 3 278 (5.7%) were with diabetes and 54 297 (94.3%) without diabetes. An adjusted RR for revision due to deep infection of 1.45 (CI: 1.00-2.09) was found for THA diabetic patients compared to patients without diabetes. This increased risk accrues particularly to THR patients with type 2 diabetes (RR=1.49 (95% CI: 1.02- 2.18)), those with diabetes for less than five years prior to THR (RR=1.69 (95% CI: 1.24-2.32)), those with complications due to diabetes (RR=2.11 (95% CI: 1.41- 3.17)), and those with cardiovascular comorbidities prior to surgery (RR=2.35 (95% CI: 1.39-3.98)).
Conclusion: Patients and surgeons should be aware of the relatively elevated risk of revision due to deep infection following THR in diabetics compared with non-diabetics, particularly among patients with insufficient control of glucose level.

Increased migration of cemented Bi-Metric® stem in hybrid THA might explain poor survival rates of this stem observed by Danish National Hip Registry. A radiostereometric study

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Background: Contradictory outcomes for cemented Bi- Metric® stem in hybrid total hip arthroplasty (THA) are reported by the Danish National Hip Registry in 2007. The survivorship rates of this stem after 11 years were 88.6%, when revisions related to femoral component in hybrid THA were analyzed. In a randomized study investigating the preheating effects on stem stability in vivo, we evaluated migration rates of 80 cemented femoral components using radiosteometric analysis (RSA).
Purpose: The detail analysis of significant migration of some cemented femoral components observed in previous study is presented in this abstract.
Methods: Eighty patients undergoing hybrid hip THA with cemented matt-surfaced Ti stem (Bi-Metric®, Biomet) were enrolled into prospective RSA study. Prostheses were equipped with three tantalum beads to enable RSA. Tantalum markers were also inserted both into the bone and cement, which allowed evaluation of prosthesis-cement and prosthesis- bone micromotions as well as cement- mantle migration relative to bone (CBI). The RSA examinations were performed at the second or third postoperative day and again after 3, 12 and 24 months. RSA images were analyzed using UmRSA software (Umeå, Sweden). Migration of femoral head centre, the tip of the prosthesis and cement mantle's translations were analyzed.
Findings: Seventy one patients reached at least 2 RSA examinations and 65 patients accomplished the study. The main stem migration occurred inside the cement mantle where subsidence, medial and posterior translations of femoral head centre were observed. The cement mantle migrated proximally i.e. opposite to stem. At 2 years we observed femoral head subsidence more than 1mm in 9 hips. This subsidence was always related with increased posterior translation of femoral head, which ranged from 0.84 to 14.3 mm. Additional 20 components subsided between 0.4 and 1mm. Increased femoral head migration was correlated with male sex and increasing BMI. Proximal cement mantle's migration observed at 3 months remained unchanged during the next 2 years.
Conclusion: One third of all stems had considerable migrations after 2 years, indicating debonding of this particular stem with a risk of development of wear debris and secondary osteolysis.

In-vivo temperature profile at cement-bone interface during cementation of preheated femoral component

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Background: The heat generation during cement polymerization might have a negative effect on bone tissue. Developing new methods of cementation technique such as preheating of femoral stem has renewed the discussion of whether the cement curing temperature could induce thermal osteonecrosis at cement-bone interface (CBI). Conventionally, a cold femoral stem acts as the heat sinker, while the preheating of the prosthesis above room temperature could increase the heat generation and damage the bone cells.

Purpose: The aim of this study was to record a temperature profile at CBI, when cementing preheated (40° C) and non- preheated femoral components during total hip arthroplasty (THA).

Methods: Eighty patients were randomly allocated to one of the 2 groups with 40 in each. Peroperative temperature measurements at CBI were performed using sterile copper-constantan thermocouples at posterior femur at the level of lesser trochanter.

Findings: A mean peak temperature reached 53.8 and 56.4° C ($p = 0.32$) when cementing non-preheated and preheated stems, respectively. However, a time interval from cement mixing to peak temperature and correspondingly cement polymerization time was significantly shorter (40 sec, $p = 0.0003$) in the preheated stem group. The median exposure time with temperatures above 50° C at CBI was 70 sec. in both groups (range: 0-200 and 0-190 for preheated stem and control group, respectively).

Conclusion: High cement curing temperatures at CBI in both groups could indicate a large cement mass due to a good cement penetration at the site of the temperature recordings. Preheating of stem to 40° C had a little effect on heat generation at CBI, but had significantly reduced cement polymerization which could be beneficial to shortening the operating time.

Excellent long term survival and performance of the non-modular extensively porouscoated SOLUTION stem in hip revision arthroplasty

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Background: Results after hip revision surgery have for many decades been bad or at least questionable in spite of various surgical concepts.
Purpose: We report up to 18 years performance of an extensively porouscoated chrome- cobalt stem designed for diaphyseal fixation.
Methods: Over a 15 years period 200 uncemented SOLUTION stem revisions were performed and form the basis of survival calculations. At follow-up in 2010 the first consecutive 93 hips were 10 years or more after surgery and form the basis of clinical and radiographical examination done by an independent observer (NJ)
Findings: Life tables show 18 years stem survival free of revision for any reason of 96%, for infection of 98.2%, for aseptic loosening of 98.9% and for stem fracture of 99.1% respectively. Of the 93 hips with 10 or more years follow-up 48 were dead. 4 were revised and 5 hips did not attend. This leaves 36 hips/29 pts. for examination 14.3 years (10.0-17.3) after index stem revision. Harris Hip Score was 85 (53-99) and Pain Score 42.8 (30-44). These results have not deteriorated since 5 and 10 years follow-up examination. Radiographs showed osseointegration of 34 stems and fibrous fixation of two. Progressive but proximal osteolysis was seen in one hip, stem subsidence in 3 and significant stress-shielding in 9 hips.
Conclusion: The concept of diaphyseal fixation in femoral stem revision has in this study stood the test of time.

Risk of revision following Oxford unicompartmental knee arthro-plasty

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Background: Unicompartmental arthroplasty is still a controversial issue in knee replacement.
Purpose: The aim of this study was to analyse possible risk factors for revision following Oxford unicompartmental knee arthroplasties (OUKA).
Methods: Since 1997 data for all patients with primary and revision knee arthroplasties performed in our department have been stored in a database. Selected for the present study was all primary OUKA performed in the period 1997-2006 as well as any revision following these operations until the end of 2008. We got information from The National Health Register and the CPR register about any revision performed at other institutions and date in case of death. Primary OUKA were grouped in three categories according to the experience of the surgeon: 1 for operation done by a surgeon who had performed less than 20 OUKA, 2 for operation by a surgeon who had performed 20-40, and 3 for operation by a surgeon who had performed more than 40. Risk of revision was analysed by Cox regression. Revisions due to pain as the only reason were excluded from the analyses.
Findings: 445 primary Oxford knee arthroplasties were included. These were followed by 46 revisions, and for 11 cases the reason for the revision was pain. Operation time was correlated to risk of revision with decreasing risk with increasing operation time (p=0,001). The experience of the surgeon was also correlated to risk of revision with decreasing risk with increasing experience (p=0,02). The 6 years survival rate for an experienced surgeon using an operation time at 90 min. or more was 97,5 % compared to a survival rate at 78,7 % for an inexperienced surgeon with an operation time less than 90 min.
Conclusion: OUKA performed by an inexperienced surgeon and OUKA performed with short operation time had marked reduced survival rates. This seems to be an essential information to institutions performing OUKA.

Survey of current pain treatment after total knee arthroplasty in Denmark

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Background: Treatment of pain after total knee arthroplasty (TKA) has changed considerably during the past five years. Here we present the current standard treatment of postoperative pain after TKA in Danish hospitals.

Purpose: By determining which treatments are in practice and how widespread they are we hope to discover and pass on local experiences and disseminate successful practices. We also aim to stimulate further research into the applied treatments.

Methods: Danish public and private hospitals performing TKA were identified mainly using the National Board of Health information system. Using a short questionnaire and telephone interviews, data were obtained from surgeons and supplemented if necessary by other staff. Interviews were made between May 21st and August 2nd 2010. Data were entered in Epidata and processed in Stata.

Findings: Replies were obtained from 45 out of 47 hospitals. Operations were mostly performed using spinal anaesthesia (n=38). Local infiltration analgesia (LIA) was used in 42 cases, alone (n=11) or in combination with femoral and/or sciatic block (n=3), intraarticular bolus and/or infusion (n=25), or saphenus block (n=1). The drugs, doses and infiltration techniques varied, as did the bolus injections and infusions. Postoperatively a tight bandage (n=40), cooling (n=38), and elevation (n=8) was used. Postoperative drugs included paracetamol (n=45) supplemented with NSAID (n=20), opioids (n=45), gabapentin (n=8), and klozoxazon (n=1). Mean length of stay was 3.2 days (SD 1).

Conclusion: Current practice reflects recent research and local experiences. This survey illustrates how practice changes very quickly as a result of intensive research in the field, and how local variations exist. Many details of postoperative pain treatment can still be optimized by systematic randomized clinical trials.

Radial neck fracture in children treated with the Centromedullary ESIN technique

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Background: Radial neck fractures in children are a rare entity accounts for only 1 % of all paediatric fractures. Different methods have been developed for the purpose of reduction and fixation of this fracture.
Purpose: The aim of this retrospective study is to show the results of Métaizeau technique, first described in 1980, for the centromedullary reduction and fixation of this kind of fracture with the ESIN technique.
Methods: Our series comprises 19 children with dislocated forearm fractures treated in our institution in the period 2004 to 2008. One patient was excluded because of a very complicated fracture dislocation of the elbow (exclusion criteria).Two patients refused to participate. We evaluated the patients clinically and radiologicaly. For the clinical evaluation, we used the Métaizeau´s classification. In the subjective evaluation, the DASH score was used. The Steel´s classification was used for the evaluation of the radiological results
Findings: We found good clinical and radiological outcome in accordance to Métaizeau and Steel classifications. The mean DASH score was 3, 06.
Conclusion: Our results are comparable to other international studies. This study confirms the Métaizeau technique as a very good treatment option for this kind of fractures.

Translation and validation of the Danish version of the Patient Rated Wrist Evaluation questionnaire

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Background: The need for validated outcome measures is increasing. The Patient Rated Wrist Evaluation (PRWE) is a 15- item wrist specific questionnaire used to measure the effect of clinical treatment of wrist injuries.
Purpose: The purpose was to translate into Danish, validate and examine the unidimensionality of the Patient Rated Wrist Evaluation in patients with wrist fractures.
Methods: Translation was done by an expert panel followed by evaluation of a lay panel and a field test on ten patients. Afterwards 60 patients treated for wrist fractures with osteosynthesis or conservatively were included. The patients answered the Patient Rated Wrist Evaluation and the Nottingham Health Profile (NHP) at 1 week and 6 weeks after start of treatment, and again the Patient Rated Wrist Evaluation three days after last control. Rasch analysis was conducted using RUMM2030 software to assess unidimensionality and to create a fitted model in order to convert ordinal scores to interval scores.
Findings: Both lay panel comments and field test revealed issues not dealt with by the expert panel, including difficulty estimating average pain which was altered to estimating maximum pain. Cronbach's alpha: 0.94. Intraclass correlation coefficient: 0.88. Difference of Means: 5.7 (CI: 1.12-10.37, P=0.017). Convergent validity at first and last control was for pain, 0.51 and 0.46, and physical mobility, 0.56 and 0.64, respectively. Rasch analysis showed unidimensionality. There was no Differential Item Functioning (DIF) for the time interval. There were indications of misfit of items, but these items displayed good content validity and were within acceptable parameters. A nomogram for conversion from ordinal score to interval score could be made.
Conclusion: The translation resulted in a modified questionnaire that represents correct easy-understandable Danish. The questionnaire can be used in clinical and research settings regarding patients with wrist fractures, and both ordinal and interval scores should be reported.

Corrective osteotomy for malunion of the distal radius fractures. A retrospective study

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Background: Malunion is one of the most common complications of distal radius fractures which causes significant disturbance of wrest function due to limited wrest motion and pain. Corrective osteotomy of malunited distal radius is often registered postoperatively functional and radiological improving.

Purpose: This study presents the clinical and radiological outcome in a case series of 20 patients with corrective osteotomy for malunion of the distal radius fractures which was performed in the period 1th January 2007 – 4th December 2007.

Methods: Patients with pain, movement and functional problems were corrected with open wedge bi-or tri planner osteotomy of the radius, mostly radiopalmar approach and with interposition of corticocancellous bone autograft from the iliac crest. The osteotomy was fixed by AO-T plates and screws. At follow-up period, the objective pain status, joint movement and functional evaluation of the wrist were performed according to Fernandez Scale. The post surgical radiographs status and wrist complications were assessed.

Findings: Pain: (Excellent – none, Good – none, Fair – moderate during exercise, poor – constant) 12 ptt. – none pain, 5 ptt. – moderate pain, 3 ptt. constant pain, total no – 20 Range of movement: (per cent of normal – full 100%, 65-100 %, 40- 64 %, 0-39 %) 4 ptt. – full, 7 ptt. > 65 %, 8 ptt. 40-64 %, 1 ptt. < 40 %, total no 20 Grip strength: (per cent of normal – 80-100 %, 70-80 %, 50-70 %) 4 ptt. > 80 %, 13 ptt. 70-80 %, 3 ptt. >50 %, total no 20 Deformity: 15 ptt. invisible, 5 ptt. slight. The average joint movement was improved in all cases . Average movement in degrees: DF - 59, VF - 58, RD - 17, UD - 30, P - 68, S – 67 Normal: DF – 80, VF – 80, RD – 30, UD – 40, P – 90, S – 90 The average radiographic appearance in degrees before and after correction. Before: DA 23,5, VA 23,7, UPV mm 10, RI 12,1 After: DA 10,0, VA 10,0, UPV mm <2, RI 18,3 The majority with normal radial length.

Conclusion: Corrective osteotomy for malunion of distal radius fractures provides a god solution with few complications for pain, joint movement and functional problems. The majority of patients were satisfied. Radiographs parameters considerably are improved by corrective osteotomy.

Does Arthroscopic Release (AR) of the Subscapularis Muscle and open transfer of the Latissimus Dorsi Muscle improve daily function in Obstetrical Brachial Plexus Lesions (OBPL)

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Background: OBPL is a traction neural injury sustained during the course of birth process. As is the case in any closed peripheral nerve injury, severity can fall within a wide spectrum and is the key determinant of prognosis and the need for intervention. These lesions leave secondary sequelae in the joints and muscles as contractions and muscles weakness.
Purpose: The purpose of this study was to evaluate the clinical outcome after AR of the subscapularis muscle, and open transfer of the latissimus dorsi muscle.
Methods: 21 ptt. (9 boys), aged 5,7 years (0 – 10) were operate on (2004 – 2007). 13 ptt. had AR with partial tenotomy of the subscapularis and decompression of the coracoid, and 8 patients also had a concomitant open transfer of the latissimus dorsi muscle. Evaluation was according to the Mallet score. Additionally, active ext. rot. of the upper arm was evaluated.
Findings: Follow-up period was 23-66 months. AR was successful in achieving approx. 40° of ext. rot. (41.6° in the arthroscopy group and 38.1° in the second group). Mean improvement Mallet score was 3.2 (1.2-5.3) in the arthroscopic group and 2.9 (0.8-4.9) in the group which also had a muscle transfer. The mean post-OP Mallet Score (a scale from 5 – 15) and external rotation in adduction showed an improvement in daily function. No complications were recorded.
Conclusion: Our technique of partial tenotomy of the subscapularis tendon and rotator interval decompression, gives results comparable to open techniques, and with a much lower morbidity. The improvements in Mallet score and active ext. rot. in adduction was significant in both groups. The indication of the concomitant muscle transfers is not clear and demands further investigation.

Follow-up after four minor hand surgery operations – general practitioner or hand clinic? A randomized prospective study

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Background: This study was designed to access the safety and effectiveness of transferring the 3-4 day and 2 weeks postoperative assessment to the general practioner (GP) after operation for carpal tunnel syndrome, ganglion cyst, Quervain´s disease and trigger finger.

Purpose: An increasing number of patients are visiting hand clinics. Postoperative follow-up after minor hand operations are increasing and can be expensive in terms of time consuming for patients and transport. If the patients could be transfer safety and with effectiveness to the general practioner, time could be used otherwise.

Methods: Fifty two patients undergoing one of four hand-operations (CTR 35 ; ganglion cyst 8 ; pulley release 9) were randomized on a block basis for the 3-4 day and 2-week postoperative wound inspection and removal of stitches to either their GP or the hospital outpatient clinic. All patients were reviewed at hospital 6 weeks postoperative when a simple questionnaire was completed. The questionnaire asked whether a wound infection had been diagnosed and if so, whether any antibiotics were prescribed . Wrist-TAM, finger-TAM, grip-strength, time consuming and VAS-pain before and 6 week after operation ,were assessed.

Findings: Two of 29 patients followed up at a GP were considered to be infected and one patient were prescribed antibiotics. None of the 23 wounds assessed in the hospital clinic were considered to be infected or having antibiotics . Both groups had a mean treatment time of 9 minutes (3-30). VAS pain was reduced in GP group with 65 % and in clinic group 72 % (not significant). Preoperative grip strength were reduced 20 % in both groups. At the 6-week assessment all 52 wounds had healed satisfactorily and none showed any evidence of infection. 6 patients were referred for hand therapy in the GP group and none in the hospital group. Finger-TAM was reduced 0.8 % in the GP group and increased 0.8 % in the clinic group.

Conclusion: Patients were assessed safely in the GP group but wound infections were probably over- diagnosed. Six out of 29 patients were referred to hand therapy in the GP group and none in the hospital group. VAS pain and grip strength were the same in both groups.

Glenoid Morphology in Obstetrical Plexus Brachialis Lesions
A 3-D CT study

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Background: Glenohumeral weakness is common after Obstetrical Brachial Plexus Lesion (OBPL). A fixed contracture often develops over time that has a deleterious effect on the glenohumeral joint development.
Purpose: The purpose of this study was to describe the 3-dimensional morphology of the glenoid cavity in children with OBPL.
Methods: Between October 2004 and May 2008 33 children with an average age of 8 years (4 – 16) were treated at Odense University Hospital. Shoulder function was assessed using the Mallet Score. Preoperative CT-scans of 27 Scapulae were available for this study. A reconstruction algorithm was used in processing the images. We measured Glenoid height, width, 2D and 3D glenoid version, inclination and spino-glenoid angle. A qualitative description of the shape of the glenoid was also made.
Findings: The glenoid version on the affected side averaged -19º (2D) and -7º (3D). The inclination was 68º on the affected shoulders and 65º on the normal shoulders. Thirteen of the affected shoulders had normal Glenoid shape and 14 CT scans revealed dysplacia. Eleven (11) glenoids had a diamond shape and the articulation was shifted towards a posterior/inferior position i 3 children. The mean preoperative Mallet score was 10.4 (range 6-15). Negative correlation was found between Mallet score and the posterior width of the glenoid (corr coef = -0.548, p=0.019), and inclination angle (corr coef = -0.650, p=0.005).
Conclusion: This is the first study to document the 3D morphology of the glenoid in children with OPBL. The 2D scans tended to overestimate glenoid retroversion. 3D scans revealed a diamond shape of the glenoid cavity in 14 shoulders. This study showed superiority of 3D-CT scans for evaluation of glenoid dysplacia

MRI findings in childrens wrists after trauma. A pilot study

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Background: Every day we see children in the emergency room with trauma of the wrist and distal radius. Standard x-ray findings are often found without fractures despite direct and indirect tenderness of the distal radius. No literature describing the MRI findings in this group of patients has been published.
Purpose: Description of the pathology behind distal radius traumas in 7-13 years old children with no signs of fractures in conventional x-rays by the use of MRI- scan.
Methods: A pilot study with 21 7-13 years old children was carried out. The median age was 12 years old. All children included in the study had a relevant trauma of the wrist or distale radius, as well as direct and indirect tenderness and no abnormal findings in standard X- rays. Within the first two days they were offered MRI-scan. Both coronal and sagital T1 recordings and coronal STIR was performed to the traumatized wrist. STIR/TIRM recordings were performed to the non-traumatizes wrist. In this manner the non-traumatized wrist functioned as control group.
Findings: All children had normal MRI findings of their non traumatized controlwrist. 7 children had no abnormalities in the traumatized wrist. 3 children had undislocated fractures of the distal radius. 3 children had undislocated os scaphoid fractures. 3 children had oedema of the distal radius 3 children had oedema of os capitatum or trapezium and 2 had soft tissue oedema.
Conclusion: This pilot study shows that 6/ 21 children had unrecognized fractures. Another 6/21 had bone oedema and 2/21 soft tissue oedema. It seems surprising that more than half of the children in this pilot group that would otherwise be diagnosed with no abnormalities have got bone affections. We don't know the clinical consequences of these findings. Do they have any relevance at all? Are these the same children that develop chronic wrist pains? Would the MRI- findings be the same in other bones? And is MRI the golden standard of diagnosing clinical relevant fractures in children at all? Further studies in the field seem necessary.

Reliability of the Mallet Classification and external rotation in adduction, in patients with Obstetrical Brachial Plexus Lesions (OBPL)

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Background: The Mallet Classification provides an assessment of global shoulder function. There are, however contradictory reports regarding the significance of interobserver reliability between examiners working in different clinical settings. Children with OBPL are no exception to this.

Purpose: The purpose of this study was to determine the interobserver reliability, of the Mallet Classification System and assessment of external rotation in adduction, performed by a Physiotherapist and a Paediatric Orhtopaedic Surgeon.

Methods: This investigation was performed as part of a continuing prospective study on patients with OBPL presenting to the Department of Orthopedic Surgery at our institution. 27 children (14 boys), aged 6,3 years (0,7 – 11,6) were evaluated 45 month (26 – 60) after shoulder surgery by two examiners on two different occasions but for the most on the same day. For statistical analysis paired t-test was used to compare means of continuous paired variables (95% confidence intervals). A Bland- Allmam plot was used to demonstrate disagreements between the observers. Prior to the initiation of this investigation, consensus building exercises were performed among the examiners.

Findings: Mean Mallet Score for the Physiotherapist was 12,0 (10,9 – 13,0) and for the Paediatric Orthopaedic Surgeon 12,2 (11,3 – 13,1). Agreement of the five values involved in the Mallet Score, was also very good as 71% were evaluated identical, 26% deviated 1 point and only 3% (all values for Trumpet Sign) deviated 2 points. The mean external rotation in adduction for the Physiotherapist was -3,2° (-13,7 - +7,4)° and for the Paediatric Orthopaedic Surgeon -0,5° (-8,6 – +7,6)°.

Conclusion: The interobserver reliability was good. Assessment of global shoulder function using the Mallet Score and external rotation in adduction can routinely be performed by a Physiotherapist.

Experience in treating unstable forearm and femur fractures in children with elastic intramedullary nail using T.... E.... N....

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Background: Unstable diaphyseal fractures of the forearm and femur in children often require osteosynthesis. Fractures of the forearm is often treated with k-wires or plating. Femur fractures can be treated with plaster-traction in smaller children, but in bigger children internal or external fixation is required. The use of elastic intramedullary nail is minimal invasive and seems to give sufficient stability.
Purpose: To verify the good result from other international studies regarding the use of TEN for forearm fractures, and present our result in femur fractures
Methods: We present our experience with TEN for unstable pediatric forearm and femur fractures. 210 patients with forearm fractures were admitted to our clinic between December 1998 and April 2010. 70 patients were treated with TEN the rest were either treated with closed reduction, K-wire our plating. 46 patients with femur fractures were admitted to our clinic between December 1998 and April 2010. 22 patients were treated with TEN. All patients in both groups were reviewed retrospectively. In the group with forearm fractures there were 38 boys and 32 girls median age 8.3 years. All fixations were protected in an above elbow plaster cast. Patients were followed up for an average of 4.2 months (range, 2-12 months). In the group with femur fractures there were 13 boys and 9 girls median age 6.9 years. All fixations were protected with a cast until radiologic union. Patients were followed for an average of 8.5 months (range 3.5-13 months).
Findings: In the forearm fractures, clinical and radiologic union was achieved within 6 weeks after the procedure in 69 children. One patient was operated 1 day after the primary operation with a plat because of unacceptable angular deformity. 5 patients had superficial pin infection after 6 Weeks and had their TEN removed without any further complications. One patient had decreased subination compared to the healty side 12 months after treated with TEN, but no functional loss was reported. In the femur fractures clinical and radiologic union was achieved within 12 weeks after the procedure in 21 children. One patient was operated 2 days after primary operation with extern fixation because of unstable osteosynthesis. Two patients had a nail removed after 6 weeks because the nail irritated the skin. One patient had 2 cm leg shortening on the operated side 12 months after operation. The patient is still followed once a year to see if there will be problems with the leg.
Conclusion: Diaphyseal fractures of the forearm and femur in children can be difficult to threat and often require osteosynthesis by internal or external fixation. Since 1998 our department has used a elastic intramedullary nail, T... E... N..., in these fractures with few complications and a god functionel result.

An uncemented hydroxyapatite coated hemiarthroplasty for displaced femoral neck fractures: Clinical and radiographic 2-year follow-up

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Background: Hemiarthroplasty is the preferred treatment for displaced femoral neck fractures (DFNF) in elderly patients. The use of uncemented stems remains controversial and issues regarding inferior fixation in osteoporotic bone, implant related pain and decreased mobilization have disfavored its use.
Purpose: We wished to investigate the clinical and radiographic performance at 2-year follow-up of an uncemented hydroxyapatite coated hemiarthroplasty used for DFNF.
Methods: We performed a prospective, 2-year, clinical and radiographic follow-up of 97 consecutive uncemented, hydroxyapatite coated hemiarthroplasties (Corail, Depuy) operated from Dec. 06 to Dec. 07. Due to unwillingness or cognitive impairment (n=6) and death before follow-up (n=44), a total of 47 patients (39 females) with a mean age 81 years were available at follow-up. Ten of these were not available for radiographic follow-up.
Findings: At 2-year follow-up 38 of 47 patients lived in their own homes and the median NMS score was 6 (range: 2-9). The median VAS pain score was 0 (range: 0- 5) at rest and 0 (range: 0-8) when walking. Patient satisfaction was 9 (range: 2-10) on the VAS scale. Anterior or lateral thigh pain or groin pain was reported by 15 patients. The EQ-5D index score at follow-up was 0.72 (range: 0.16-1.00) and the EQ-5D VAS score was 70 (range: 15-100). There were no radiographic signs of implant loosening in any of the hips.
Conclusion: The results suggest that an uncemented hydroxyapatite coated hemiarthroplasty can be used with good clinical and radiographic results in surviving patients 2 years postoperatively. Previous speculations of compromised stem fixation and related inferior clinical results seem overrated.

Can immediate weight bearing be allowed following locking plate osteosynthesis of proximal tibial fractures?

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Background: Traditionally, immediate weight bearing following osteosynthesis of proximal tibial fractures is not allowed due to fear of intra-articular fracture collapse. Locking plates could however improve stability of osteosynthesis and optimize support of the articular surfaces. Thus, allowing greater loading forces.
Purpose: To investigate if immediate weight bearing can be allowed following locking plate osteosynthesis of proximal tibial fractures.
Methods: We retrospectively assessed all locking plate osteosynthesis of proximal tibial fractures operated from Nov. 2007 to Sep. 2009. Patient demographics, complications, reoperations and radiographic outcome at 6-8 week follow-up were assessed. The study group consisted of 42 patients (23 females/19 men) with a mean age of 50 yrs (range: 21-88 yrs). The median ASA score was 1 (range: 1-3) and cognitive impairment was found in 2 patients. The fracture distribution was: Partial intraarticular AO type 41B (n=36); Complete intraarticular AO type 41C3 (n=4); Extraarticular AO type 41A (n=2). Two groups were compared: 26 patients were not allowed to bear weight within the first 6-8 weeks, and 16 were allowed to bear weight immediately postoperative.
Findings: Groups were comparable with respect to demographic parameters and distribution of fracture types (p=0.14- 0.95). The use of bone allograft, the number of screws inserted, and the application of postoperative Don-Joy bandage were comparable between groups (p= 0.17, 0.73 and 0.55). Overall, persisting depressions of the articular surface ranged from 0-5 mm postoperatively with no difference between groups (p=0.26). At follow-up 6-8 weeks postoperative no patients were reoperated, and no changes in radiographic configuration of the fracture site were observed in either group.
Conclusion: Given the retrospective design it seems that immediate weightbearing following locking plate osteosynthesis of proximal tibial AO type 41B fractures can be allowed. Future prospective studies are needed.

Preoperative factors predicting in-hospital outcome in patients with hip fracture following multimodal fast-track rehabilitation concept

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Background: The concept of multimodal rehabilitation of patients with hip fracture has proven effective. Still, some patients do not regain their previous basic mobility independency in the acute orthopaedic setting. Thus, clinicians need to know the potential of each patient.
Purpose: Previous models established a low prefracture New Mobility Score (NMS), in addition to older age and having an intertrochanteric fracture as independent predictors of outcome. Still, such models need to be confirmed. The aim was to examine the validity of previously established models of in- hospital outcome after hip fracture surgery.
Methods: A total of 213 consecutive patients (157 women and 56 men) with a median age of 82 (IQR, 75-88) years, admitted from their own home to a special hip fracture unit, and following a multimodal optimised rehabilitation concept. Outcome variables were the regain of independency in basic mobility during admittance and discharge destination. The Cumulated Ambulation Score was used to evaluate basic mobility defined as; independency in getting in and out of bed, sitting down and standing up from a chair, and walking. Discharge destination was classified as own home or further inpatient rehabilitation facilities in the community.
Findings: Multiple logistic regression analysis, revealed the prefracture NMS functional level, age and fracture types as the only independent predictors, when adjusted for gender, mental and health status. Thus, a patient with a low prefracture NMS and/or an intertrochanteric fracture was respectively, 6 and 4 times more likely not to regain independency in basic mobility during admittance, and 4 and 3 times more likely not being discharged to own home, compared to a patient with a high prefracture NMS level and a cervical fracture, respectively. Correspondingly, multiple linear regression analyses showed that patients with a low prefracture NMS level and/or an intertrochanteric fracture, who actually did regain independent mobility, required on average 2.3 and 2.6 days more to achieve this functional level. Further, odds of not being discharged directly to own home increased with 9% per each additional year a patient got older.
Conclusion: The prefracture NMS, age and fracture type were confirmed as independent predictors of in-hospital outcome in patients with hip fracture who followed a multimodal rehabilitation concept. Thus, clinicians, using these three easily available variables, have the possibility to spot patients who may benefit from special attention and more intensive training.

Complications and functional outcome after internal fixation of dorsally displaced distal radial fractures

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Background: Recently there has been an increasing interest in open reduction and internal fixation of distal radius fractures. Even so further studies are still needed.
Purpose: To document the functional outcome and identify complications among patients treated with a volar locking plate (DVR-locking plate, DePuy Orthopaedics) newly introduced in our department.
Methods: The study was designed as a historical cohort study. 37 females and 6 males with a mean (CI) age of 72,6 (69,5-75,6) were included. 35 received 6 months follow up (median 6,4) and 30 received 1 year follow up (median 14,0). Outcome measures included the Disability of the Arm, shoulder and Hand (DASH) questionnaire, grip strength, active wrist and forearm range of motion and radiographic parameters.
Findings: The mean DASH score was 15,5 (10,5- 20,6) at 6 months and 6,3 (2,5-10) at 1 year. There were at 1 year statistical significant difference between the fractured and non-fractured wrist for flexion, extension and grip strength but not for supination and pronation. X-rays showed an improvement from preoperative to postoperative in dorsal angulation (17,7 degrees), inclination (6,6 degrees) and radial length (4,8 mm). A total of 10 major complications were identified: 4 had screws in the joint, 2 tendon ruptures, 2 plates were removed, 1 carpal tunnel syndrome, 1 lacking radiological healing. There were no association between major complications and the surgeons experience level (> 10 operations). Evaluation of the X-ray images showed 14 cases of too radial plate placement and 1 one forgotten tower.
Conclusion: The literature describes an overall complication frequency between 0 and 27%, with a lower frequency of secondary procedures compared to this study. There is still a need for further studies

The Hvidovre Algorithm for hip fracture surgery reduced the 1-year reoperation rate from 18% to 12%

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Background: We implemented an exhaustive operative and supervision algorithm for surgical treatment of hip fractures primarily based on own previously published literature.

Purpose: Our aim was to improve supervision and reduce the rate of reoperations.

Methods: 2000 consecutive patients >50 years admitted with a hip fracture were included, 1000 of these prospectively after implementation of the algorithm. Demographic parameters, hospital treatment and reoperations within the first postoperative year were assessed from patient records.

Findings: 931/1000 operative procedures were operated according to the algorithm, compared to only 726/1000 prior to its introduction ($p<0.001$). Retrospectively we found that 13% (208/1657) of operative procedures performed as the algorithm dictates were reoperated compared to 28% (96/343) of operative procedures performed with other methods ($p<0.001$). In logistic regression analysis combining sex, age, ASA score, cognitive function, new mobility score and level of surgeon's experience, not following the algorithm was a predictor for re-operation ($p<0.001$ log. reg.) After implementing the algorithm, junior registrars still performed half of the operations, but unsupervised procedures declined from 192/1000 to 105/1000 ($p=0.039$). The rate of reoperations declined from 18% to 12% ($p<0.001$, log.reg.), with a 24% (112/467) to 18% (87/482) decline for intra capsular fractures ($p=0.025$) and a 13% (68/533) to 7% (37/518) decline for extra capsular fractures ($p=0.002$). The extra bed-days caused by reoperations were hereby reduced from 24% to 18% of total hospitalization.

Conclusion: An exhaustive algorithm for hip fracture treatment can be implemented. In our case, the Hvidovre Algorithm both raised the rate of supervision and reduced the rate of reoperations, the latter saving many hospital bed-days.

Serial Dilation reduces Graft Slippage compared to Extraction Drilling in Anterior Cruciate Ligament Reconstruction: A Randomized Controlled Trial using Radiostereometric Analysis

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Background: The hamstring tendon graft has become increasingly popular in anterior cruciate ligament reconstruction because of low donor-site morbidity. However, the tibial fixation is considered problematic, partly because of low tibial mineral bone density.
Purpose: This study tested the hypothesis that serial dilation of the tibial tunnel could provide a stronger anchorage of the graft-fixation-device complex compared to traditional extraction drilling.
Methods: Forty patients (22 males and 18 females) undergoing ACL reconstruction were randomized to either extraction drilling (group ED) or compaction by serial dilation (group SD) of the tibial tunnel. Tantalum beads were placed in the tibia, femur, and in the hamstring graft. Radiostereometric analysis (RSA) were performed postoperatively and again after 6, 12, and 24 weeks. Migration of graft in the bone tunnels as well as knee laxity was assessed using RSA and a TELOS stress device.
Findings: Six patients (3 males and 3 females) were excluded during follow-up, which resulted in 17 patients in group ED (median age: 30 years (range: 20 – 50)) and 17 patients in group SD (median age: 32 years (range: 20 – 49)). The mean migration of the graft at in the tibial bone canal after 3 months was 1.3 (SD 0.6) mm, in group ED and 0.8 (SD 0.5) mm in group SD (P = 0.02). The overall knee laxity after 3 months was 13.0 (SD 4.0) mm in group ED and 10.9 (SD 3.1) mm in group SD.
Conclusion: This study found significantly less slippage of the hamstring graft in the tibial bone canal in the serial dilated group compared to the extraction drilling group. The clinical relevance of the difference is unknown. No difference in stress radiographic knee laxity was found between the 2 groups.

Bone density in relation to failure in patients with osteosynthesized femoral neck fractures

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Background: The treatment of femoral neck fracture with internal fixation (IF) is recommended in younger patients and has compared to arthroplasty the advantage of retaining the femoral head. A big problem with osteosynthesis is though failure. Finding predictors for fixation failure is still an ongoing process and osteoporosis has been suggested as a predictor.
Purpose: To correlate bone mineral density (BMD) in regard to failure of IF in osteosynthesized femoral neck fractures.
Methods: In a health technology assessment study from 2005-2006 at Odense University Hospital, Department of Orthopaedic Surgery and Traumatology, 177 patients with femoral neck fractures accepted DEXA –scanning of the hip and lumbar spine assessing BMD. Final follow-up were 01.08.2010 and 142 patients with IF comprised the final cohort. The cohort consisted of 106 females and 36 males with a mean (CI) age of 77,1 (75,3-78,9). Failure is defined as revision surgery or new fracture.
Findings: 69 patients had a t-score (total hip) below -2,5 SD as defined for osteoporosis. At 1 year the overall (dislocated) failure rate was 34,3 % (44,2 %), at 2 years 45,1 % (59,4 %) and at end of follow-up 49,2 % (62,1 %). In the cox regression analysis the following factors for failure were significant: dislocated fracture, osteosynthesis placement and prior fracture. There were no association for total hip BMD, neck BMD, age, sex, quality of fracture reduction, walking disability, independent living, alcohol or smoking. A cox regression sub analysis of the undisplaced fractures showed significant result only for osteosynthesis placement.
Conclusion: There is no association between BMD and failure of internal fixation in osteosynthesized femoral neck fractures.

The Arthroscopic Trochleoplasty - A prospective 2 year follow-up

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Background: The Arthroscopic Trochleoplasty (AT) in combination with reconstruction of the Medial Patellofemoral Ligament (MPFL) is a surgical solution for patients with episodic patella dislocation in association with trochlea dysplasia. The procedure aims to restore normal anatomy and achieve osseos and ligamentous stability. The AT has been found to have the usual benefit of minimal invasive surgery compared to the Open Trochleoplasty.
Purpose: A follow up after combined AT and MPFL reconstruction. No previous studies has presented results after AT.
Methods: Indications for AT and MPFL reconstruction were 2 or more patellar dislocations, a persistent apprehension sign from 0 - 30° of flexion and trochlear dysplasia grade B to D. Exclusion criteria was a cartilage defect in the trochlea ICRS grade 3 or 4 with a diameter of 5 mm or more. Tegner, Kujala and KOOS scores have been recorded prospectively. Eleven consecutive patients (12 knees), 8 women and 3 men with a median age of 17 (13 – 38) were followed prospectively for an average of 21 (8- 29) month.
Findings: The preoperative and postoperative median scores were as follows: Kujula score 67 to 97(53-99), Tegner score 3 to 6(4-8) , KOOS score: Pain 88 to 100 (53-100), Symptoms 88 to 86(43-100), ACL 96 to 99(78-100), Sports 45 to 95 (30-95), QDL 25 to 66 (19-100). No redislocation was reported. A negative apprehension sign was found in all cases. No complications were seen.
Conclusion: This is the first presentation of the results after AT in combination with MPFL reconstruction. All patient achieved a stable patella. In regards to the applied kneescores improvement was observed in respect to all parameters.

Predicting mortality in hip fracture patients using routine blood tests

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Background: Hip fractures are associated with excess mortality, and several studies have pointed out the burden on society health care costs and the need to optimize cost effectiveness in treatment.
Purpose: The goal of our study was to investigate if patients with a higher risk of death after hip fracture could be identified using routine blood tests taken on admission.
Methods: All hip fracture patients admitted to the Department of Orthopedics, Bispebjerg University Hospital from October 2008 till December 2009 were included prospectively. We only included patients that had project blood samples taken at the day of admission resulting in 324 hip fracture patients for further analysis. Follow up data on mortality were obtained from the civil registration system the first of February 2010. Predictors for mortality were determined by logistic and cox regression models. $P < 0.05$ was regarded as statistically significant.
Findings: Of the 324 hip fracture patients under study, 66 (20%) died within the study period. The results of stepwise Cox multivariate regression models for survival during the first three months after admission revealed that plasma creatinine, albumin and age predict mortality. The hazard ratios were 1.04 (95% CI: 1.005-1.09, p=0.02), 1.01 (per unit increase)(95% CI: 1.01-1.02, p<0.000), and 0.87 (95% CI: 0.80-0.94, p=0.002) for age, plasma creatinine and albumin respectively. The 90 day mortality was 13% and 42% in patients with normal and elevated plasma creatinine levels respectively.
Conclusion: Hip fracture patients are known to have a high risk of postoperative mortality. Our findings suggest that it might be possible to identify at- risk patients who might benefit from increased attention the first months following surgery using already available blood samples.

A Bone Cyst Treated With Corticosteroid Installation In An Osteopetrotic Child

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Background: Osteopetrosis was first described in 1904 by Albers-Schoenberg, as a phenomenon of increased radiographic density of the bones. To our knowledge bone cyst formation in osteopetrotic patients has not previously been described. Bone cyst can weaken the bones even more and result in a fracture, which is very difficult to treat in this kind of patients

Purpose: We report a case of a child with autosomal dominant osteopetrosis and a subtrochanteric bone cyst. The cyst was treated in a minimal invasive manner with percutaneous bone drilling and local corticosteroid injection. The cyst resolved completely

Methods: 12 years old boy, with a family history of autosomal dominant osteopetrosis. An X-ray showed cystic changes in the proximal right femur. Because of pain and the increased risk of a pathological subtrochanteric fracture, we treated the patient by percutaneous drilling of the sclerotic cystic wall, aspiration and local injection with 80mg Depo-Medro twice.

Findings: X –ray control after 8 months showed complete healing of the cyst and the patient had total remission of the complains.

Conclusion: Other treatment options would be curettage and bone transplantation. The present case demonstrates that bone cysts in children suffering from osteopetrosis can be treated successfully with installation of corticosteroid and we recommend this treatment as first choice.

Effect on Implant Fixation of Simvastatin Applied Locally in a PDLLA Coatning

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Background: About 2% of the population >60 years has a total hip replacement. A solid initial fixation of the implant improves the longevity and it is desirable with a stable primary fixation of the implant in order to avoid revision. Statins acts by inhibiting the HMG coenzyme A reductase and by increasing the expression of BMP2, a potent growth factor inducing bone formation in vivo. Local application of statin has showed to be beneficial in fracture healing and may also improve implant fixation.

Purpose: We hypothesized that locally applied simvastatin would improve implant fixation.

Methods: Twelve dogs each received four experimental implants, two in the proximal part of each humerus. Ti implants measuring 6x10mm were used. The four groups were: Ti implant, Ti implant+coating, Ti implant+PDLLA+simvastatin (0.1 mg) and Ti implant+PDLLA+simvastatin (1.0 mg). All implants were surrounded by a 1.0mm gap. After four weeks the specimens were prepared for biomechanical push- out testing yielding max sheer strength, max sheer stiffness and energy absorption. Statistical analysis by oneway Anova and paired t-test.

Findings: After four weeks the implants coated with PDLLA +/- simvastatin showed a significant decrease in all biomechanical parameters compared to the uncoated Ti implants. The implants coated with PDLLA+simvastatin showed improved implant fixation compared to the implant coated with PDLLA alone, most pronounced in the high dose group, however not significant.

Conclusion: This study indicates that there may be a beneficial effect of locally applied simvastatin in regards to implant fixation compared to only PDLLA coated implants but not when comparing to bare Ti implants. The study also suggests that the biodegradable PDLLA coating is not appropriate for delivering biological active agents to the implant-bone interface

Test-retest reliability of maximal leg muscle power and functional performance measures in patients with severe osteoarthritis (OA)

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Background: Muscle power, taking both strength and velocity into account, is a more functional measure of lower extremity muscle activity compared with the traditionally used isometric and/or isokinetic muscle strength. More functional measures are preferred to determine muscle function and as outcomes in exercise studies in patients with OA.
Purpose: To evaluate the reliability of single-joint and multi-joint maximal leg muscle power as well as functional performance measures in patients with severe OA.
Methods: Subjects: 20 patients diagnosed with severe OA and scheduled for unilateral total hip or knee replacement (mean age: 68.7 ± 7.24). 11 knee patients (6 female) and 9 hip patients (4 female), volunteered to participate. Subjects underwent a test battery on two occasions separated by approximately one week (range 7 to 11 days). Muscle power was measured using a linear encoder during unilateral isolated single-joint knee extension and flexion and unilateral isolated single-joint hip extension and abduction. Muscle power of unilateral multi-joint knee and hip extension was obtained with a leg extension press. Three functional performance measures (20 m walk, 5 times chair stands, maximal number of knee bends/30sec) were also evaluated. Pain was measured on a VAS scale prior to and after conducting the entire test battery.
Findings: For single-joint maximal peak power the observed CVws ranged from 7-25% and for multi-joint maximal peak power from 20-22%. For the three functional performance measures (20 m walk, 5 times chair stands, maximal number of knee bends/30sec) the CVws were 5%, 14%, and 17%, respectively. A systematic and significant improvement was observed for the multi- joint maximal peak power (p=.0046, CI - 28.8;-6.13), 5 times chair stands (p=.004, CI 0.96;2.66) and 20 m walk (p=.0037, CI 0.16;0.68) indicating a learning effect. A decrease in pain was found after testing (VAS change score) (p=.0005, CI -1,64; -.55).
Conclusion: Familiarization sessions are needed to avoid learning effects when testing muscle function. Single-joint and multi- joint muscle power over the hip and knee, and functional performance measures, can be evaluated with moderate to good reliability in patients with severe OA. The test battery was feasible for elderly patients with severe OA as indicated by no increase in pain after testing.

The influence of muscle forces on the stress distribution in lumbar spine

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Background: Previous studies of bone stresses in the human lumbar spine have relied on simplified models when modelling the spinal musculature, even though muscle forces are likely major contributors to the stresses in the vertebral bones. Detailed musculoskeletal spine models have recently become available and show good correlation with experimental findings.

Purpose: A combined inverse dynamics and finite element analysis study was conducted in the lumbar spine to investigate the effects of muscle forces on a detailed musculoskeletal finite element model of the 4th lumbar vertebral body.

Methods: The muscle forces were computed with a detailed and validated inverse dynamics musculoskeletal spine model in a lifting situation, and were then applied to an orthotropic finite element model of the 4th lumbar vertebra. The muscle model consisted of roughly 1000 individually activated muscle fascicles of which about 188 are located in the lumbar spine area. The FE model consisted of 63974 volumetric elements for trabecular bone and 8886 shell elements with a thickness of 0.6 mm for cortical bone. Static analysis of the FE model was performed and the results were compared with those from a simplified load case FE model without muscles.

Findings: In general inclusion of muscle forces in the FE model increased the Von Mises stress by 30 % in the superio-anterior and central part of the vertebral body and in the pedicles.

Conclusion: The application of spine muscles to a finite element model shows quite clearly that muscle forces play a large and non- negligible role for the stress distribution in the vertebrae. This is especially important, when considering compression fractures in the elderly population with decreased trabecular strength, where small changes in the load axis combined with muscle forces would lead to such fractures.

Lightning Injuries. A general review and Case report of a 24-year-old footballer struck by lightning

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Background: Lightning is the second most common cause of weather-related deaths in the world, affecting thousands of people worldwide, with a global mortality rate of 20 – 30%, and a global mortality of about 1000 deaths per year. A 24-year old footballer struck by lightning was admitted to Hvidovre University Hospital for treatment of several serious organ failures. Due to the severity of damage the patient suffered, both his lower extremities was revised almost daily for one month before final treatment with left lower leg amputation and severe disability of the right leg.
Purpose: This study is a review of the literature on lightning injury in an orthopedic perspective in relation to the above mentioned case to optimize the future orthopedic assessment and treatment of such patients.
Methods: The study included a comprehensive review of the clinical case and a review of a pub med search that retrieved 14 studies on lightning injuries.
Findings: A 24 year old healthy athlete was admitted after initial resuscitation at a football field after a direct strike of lightning. Clinical markers such as CK and lactate dehydrogenase showed peak values of 706,000 IU/L and 21.300 IU/l. Serum electrolytes also showed extreme values; e.g. Potassium showed peak value of 6,6 mM. From the biochemical markers; rhabdomyolysis, metabolic acidosis and acute renal failure was expected, prompting continuous venovenous haemofiltration (CVVH) and hypothermia treatment. Due to the large water excess, vasospasms and paralysis of the smooth musculature, the patient developed compartment syndrome of both crus, abdomen and experienced multiple organ failure, with suspected compartment syndrome of the gastro intestinal tract, prompting acute fasciotomy of both lower crura and laparotomy. Furthermore, revisions removing non vital tissue on both legs were done for a period of 30 days at intervals of one to two days following the fasciotomy, additionally VAC treatment and special compression bandages was applied for a period over 1 month to relieve pressure building up.
Conclusion: All lightning strike victims should be assessed as victims of trauma with the institution of both advanced trauma and cardiac life support. MR and scintigraphy are valuable clinical markers for depicting the site and extent of muscle damage caused by the lightning strike and should at all times be performed at CK levels above 16000 IU/l (Watanabe, 2007 2 /id). If the CK value is steadily rising despite being treated with extracorporeal blood purification, an additional MR or scintigraphy should be assessed after the first evaluation for depicting extra muscle injuries. Aggressive approach with fairly extensive debridement is recommended based on MRI and scintigraphic findings.

Validation of a Danish translation of the measure "Pediatric Quality of Life Inventory 3.0 Cerebral Palsy Module (PedsQL 3.0 CP Module)" to assess the quality of life in children with cerebral palsy (CP)

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Background: Health-related quality of life is a measurement of the individual's own perception of their physical health, mental and social function and emotional state.This can be measured quantitatively by self-reporting questionnaire,and these exist in English.

Purpose: PedsQL 3.0 CP Module is an english questionnaire assessing the quality of life in children with CP.We aimed to translate this questionnaire to Danish.

Methods: The english questionnaire is designed to assess the quality of life in children and adolescents with CP.There exists a validated stepwise process, when translating the questionnaires to a foreign language.This process involves several steps, including forward translation to danish and then backwards translation to english.The translation was then tested on target groups of 14 CP children and 19 of their parents.Their feedback on the danish translation was incorporated into a final danish version.

Findings: Questionnaires of self-reporting have been translated for the age groups 5 to7, 8 to 12 and 13 to 18 years for CP children.Furthermore, questionnaires for parents with CP children were also translated for the above mentioned three age groups and for the age group 2 to 4 years,where self-reporting would be difficult to obtain accurately. All of these translations into danish were validated by the incremental process.The translations were subsequently approved by the MAPI Research Institute Trust, and will be available as a danish local terms translation in the near future.

Conclusion: PedsQL 3.0 CP Module is a practical and easily applicable clinical tool measuring self-reporting on quality of life in CP children. It is possible to use the questionnaires for assessing the quality of life of CP children in clinical trials, with new treatments or to detect changes in a child's clinical status.

Crural amputation in a newborn after intraosseous needle insertion, and infusion

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Background: Intraosseous (IO) needle insertion, and infusion is considered an easy and reliable method providing vascular access in acute circulatory collapse where other methods have failed within reasonable time. Complications are considered few, but may be serious.
Purpose: We present a case of a newborn girl, who had an IO needle insertion and infusion into tibia, which was lifesaving, but caused subsequent necrosis and subsequent transtibial amputation.
Methods: Casuistic report.
Findings: A newborn was admitted with circulatory collapse, respiratory insufficiency and fixed dilated pupils, due to sepsis. Attempt of intravenous access times three failed, and subsequently IO needle insertion was performed anteromedialt on proximal right tibia using the EZ-IO drill® (Vidacare). Standard resuscitation protocol for newborn septic shock was followed, including fluid resuscitation and antibiotic treatment. As ionised calcium level was low (0.6 mM) and heart failure was verified by immediate eccocardiography calcium was administered through the IO needle, immediately followed by white demarcation of the skin distally for the puncture site. The clinical situation improved, umbilical venous catheter was established and the IO needle removed within an hour. The newborn survived, but the demarcation progressed to circular full-thickness necrosis and transtibial amputation was performed 1½ month later.
Conclusion: IO needle insertion, and infusion were part og the lifesaving treatment received by this newborn. Despite following optimal recommendations the treatment resulted in amputation. We suspect the necrosis was a consequence of extravasations of tissue toxic calciuminfusion between the IO needle and the soft immature corticalis.

Does larger heads prevent luxation?

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Background: Dislocation is serious postoperative complication of the primary total hip arthroplasty. Restrictions in range of motion are applied the first 3 months to prevent this. New prosthesis designs using improved ceramics and polyethylene allow the use of larger femoral heads for surgical implantation. There are clinical indications that the use of larger femoral heads provides better range of motion and stability against dislocation.
Purpose: The purpose of this study was to investigate whether post operative restrictions in range of motion could be avoided by using larger femoral heads by analysis of selected high risk dislocation situations. We used gait analysis and the Anybody Modelling System for motion and reaction force analysis. In this study we used the design of the R3 cup system© of Smith and Nephew©.
Methods: Data of motions from 'bending down from standing' and 'getting up from a deep chair' were recorded with the Vicon Motion Systems. These data were transferred to The AnyBody Modelling System for motion and cup reaction force analysis. Here kinematic and kinetic data were extracted to evaluate the distance from neutral to impingement (DTI) and the risk of spontaneous dislocation. DTI was located as a rise in reaction forces. Head sizes of 28, 32, 36 and 52 mm with corresponding liners and increasing cup sizes were examined.
Findings: DTI increased with larger head size, only giving impingement for the 28 mm head. The reaction forces pointed posterior as for posterior luxation. DTI also increased when the cup size was increased.
Conclusion: Conclusively the most optimal prosthesis design is dependant of head and cup size, to achieve better ROM and stability. There were no sign of impingement for femoral heads larger than 28 mm for the R3 cup©.

Development of a Structurally Graded Polycaprolactone Scaffold for Hyaline Cartilage Repair

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Background: This study was at pilot study for an ongoing in vivo study. We needed to determine the optimal dioxane-water ratio and molecular weight, of the structurally graded scaffolds, before moving on the animal experiments.
Purpose: Rapid prototyping is a very precise scaffold manufacturing technique where scaffolds can be constructed from MRI or CT scans to fit into the individual tissue defects. The aim of this study is to develop a novel Structurally Graded Poly-Capro-Lactone scaffold using rapid prototyping for cartilage tissue engineering.
Methods: A novel SG-PCL scaffold was constructed using rapid prototyping ?(Ø 4 mm, height 2 mm). PCL fibers (MW 50 kDa) with a diameter of 120 m were plotted producing a 3-dimensional web. The scaffold was subsequently submerged into a mixture of dioxane, PCL and water, and lyophilized at -32°C, creating an extremely porous graded structure. By shifting the water-dioxane ratio, 16 batches of scaffolds with different pore sizes were made. Using scanning electron microscopy, two scaffolds were selected, based on porous structure. The two scaffolds were then constructed with a graded structure of 25 and 50 kDa, giving a total of four different scaffolds (#1-4). They were cultured with human chondrocytes and the viability was analyzed using confocal microscopy after 1, 3 and 6 days. The scaffolds were rated based on cell migration, cell shape and distribution of viable cells.
Findings: The scaffolds contained macro-, micro-, and nano-pores. A large difference in investigated parameters was observed and Scaffold #3 with a water-dioxane ratio of 0.0415 provided the most viable environment for chondrocytes according to the above-mentioned criteria. This scaffold consisted of PCL fibers of 50 kDa and lyophilized PCL of 25 kDa.
Conclusion: We successfully constructed a SG-PCL scaffold that can be used in future in vivo experiments, and has the potential of subsequent functionalization with nanoparticles and growth- and differentiation factors.

The Wear Effect of Hydrophilic Coatings on Hard Implants

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Background: A serious limiting factor in implant lifetime is wear. Many methods, including ceramic, MoM and highly polishable products, contribute to reducing wear, however other surface treatments are also accessible. Lubricating films often contribute very low friction in many non- medical applications, and could therefore possibly reduce the wear in implants.
Purpose: During development of an interpositional intraarticular implant device, experimentation was done with introducing a water film covalently bonded directly to the polymeric implant surfaces. This study is concerned with quantifying the coating and its effect in reducing wear.
Methods: Poly(vinyl pyrolidone) (PVP) was coated uniformly on a poly(ethylene) implant (as well as simplified discs) in a custom made plasma coating chamber with 3 electrodes employing 0-600V, and using dried vinyl pyrrolidone monomer. Several techniques were used to quantify the PVP coating: TOF-SIMS, XPS, CLSM, Photomicrography, ATR-FTIR and Pin on disc.
Findings: Using a Pin on disc investigation, results were obtained quantifying frictional coefficients. The discs were tested at a constant speed of 0,01 m/s and loads corresponding roughly to the normal walking forces in a hip joint at 37°C ± 1° C. 1) The coefficient of friction was in all cases found to be in the range of 0.12 to 0.18. 2) No significant difference can be seen between PVP coated and not- coated discs. This was later verified in a 3D hip joint test rig at Risø. 3) The coating was removed or compressed due to wear (supported by the observation that the surface properties changed from hydrophilic to hydrophobic). 4) The results did not differ when changing track diameter, loads or sampling frequency (1Hz to 10Hz).
Conclusion: Adding a thin (<100nm) hydrophilic layer of PVP in hard implants have little effect with respect to frictional coefficient, and is therefore not expected to reduce wear. The reason could be that water is pressed out of the PVP matrix or the matrix is simply destroyed by the very high forces acting in the hip joint. Water films could possibly have an effect in less weight bearing joints.

Daycase unicompartmental knee replacement surgery

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Background: Today's standard of care in knee arthroplasty surgery is hospital admission for 2-4 days.
Purpose: The purpose of this paper is to describe our standard of care in unicompartmental knee replacement surgery (UKR) , performed as daycase surgery.
Methods: We have offered UKR as the standard treatment for arthritis of the medial tibiofemoral joint space since 2005. In 2007 we initialized a protocol performing UKR as daycase surgery. All patients are offered an extensive information program including instruction by doctors, nurses and physiotherapists. Before discharge from the hospital, the patient is evaluated according to the protocol by a trained nurse. A nurse conducts a 4-6 days outpatient visit, monitoring swelling, pain, nausea and oozing. After 6 to 8 weeks the patient is evaluated by a physiotherapist. We collected data on length of stay for all patients from 2005 to 2010. We describe the 4-6 days results of a cohort of 35 consecutive patients who had a UKR in 2010.
Findings: We have registered 198 medial UKR since starting the daycase protocol. 95 of the 198 patients were discharged on the day of surgery. In our 35 patient cohort, 23 of 24 patients evaluated their surgery and 4-6 days of rehabilitation as good or excellent; 1/24 neither good nor bad; 11 missing. 31/35 exercised as recommended; 30/35 satisfactory pain treatment; VAS at rest: mean 1,5 (SD 2,0), VAS during activity: mean 4,3 (SD 2,3). 27/35 had no nausea the last 24 hours, 28/35 did not have problems eating. 11/35 reported constipation or slow bowel function. 4/35 had minor oozing from the wound; no patient had any sign of infection.
Conclusion: We state that daycase UKR surgery is a safe and satisfactory procedure, as performed by our protocol.

Effect of standing position and weight-bearing on joint space width and pelvic tilt in radiographs of patients with dysplasia of the hip

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Background: It is generally accepted that the radiographs of the hip are taken in supine position. It is of interest how radiographic measures differ in patients with hip dysplasia when changing positioned from supine to standing knowing that the patient's functional problem mostly occurs during weight-bearing.

Purpose: The primary aim of the present study was to determine if pelvic tilt (represented by the distance between the symphysis and the sacrococcygeal joint), center edge angle, acetabular index angle, joint space width, approximated acetabular index of depth to width, femoral head coverage, posterior wall sign, and cross-over sign differ between supine and standing weight-bearing position in patients with hip dysplasia. The secondary aim was to estimate interobserver agreement.

Methods: 23 patients with clinically diagnosed hip dysplasia from the waiting list for periacetabular osteotomy were included and had supine and standing weight-bearing standardized anteroposterior pelvic radiographs. Two readers independently assessed all the radiographs.

Findings: The distance between the symphysis and the sacrococcygeal joint and center edger angle were reduced in females and males, respectively. Acetabular index angle increased overall. Minimum joint space width increased in females. We found no change in acetabular index of depth to width and femoral head coverage. Posterior wall sign increased and cross-over sign decreased in the females.

Conclusion: Several of our key-measures changed significantly from supine to standing position and especially those for evaluation of acetabular version.Preoperative planning of surgery for reorientation of a retroverted acetabulum has to be done on both supine and standing weight-bearing radiographs of the pelvis.

Metastatic pattern, local relapse and survival of patients with myxoid liposarcoma

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Background: Sarcomas are rare tumors accounting for approximately 1% of all malignant tumors in adults, and 4/5 are soft tissue sarcomas. In general the metastatic pattern of soft tissue sarcomas are hematogenic to the lungs, and the recommended follow-up for metastases in these patients is routine chest X-rays.
Purpose: To assess the metastatic pattern of the histological subtype myxoid liposarcoma, and evaluate the metastases-free survival, local relapse-free survival and overall survival.
Methods: Twenty-five patients (F/M = 12/13, mean age 50 (24-85) years) were diagnosed with a myxoid liposarcoma at the Department of Orthopaedic Surgery, Rigshospitalet from 1995-2004 (1995- 1999 (n=7), 2000-2004 (n=18)). In 2010 a retrospective review of patient files combined with an extraction of survival data from the CPR-registret were performed. The following parameters were recorded: tumor localization, size and depth; classification of tumor; surgical margin; type of treatment, type and time of follow-up; distant metastases; local relapse, and final health status (death/alive). Statistics: Kaplan-Meier survival analysis.
Findings: Six patients had metastases during the observation period. Two patients had metastases at the time of diagnosis, while metastases occurred within 2-3 years in 3 patients and in one patient 11.9 years after the primary diagnosis. We found an unusual metastatic pattern since all metastases occurred at extra- pulmonary sites (intraabdominally/peritoneally, spine, chest wall, mediastinum, paravertebraly, and cutaneously). The probability for metastasis-free 5 and 10 years survival was 79%. Five patients had local relapse, and the first local relapse occurred within 2 years after surgery in 4 patients. The probability for 5 and 10 years local relapse-free survival was respectively 81% and 72 %. The probability for overall survival after 5 and 10 years was 72% and 68 % respectively.
Conclusion: In this study the patients with myxoid liposarcoma had only extrapulmonary metastases, and no metastases of the lungs. Most local relapses and distant metastases occured within the first 2-3 years after surgery. We suggest that follow-up of patients suffering from myxoid liposarcoma should also include imaging of the abdomen/pelvis.

Medial patellafemoral ligament reconstruction results in good patient satisfaction. A retrospective study

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Background: Patellofemoral dislocations are common. In cases with recurrence or residual instability, surgical intervention is usually considered due to poor results with conservative and physiotherapeutic treatment. Numerous treatment protocols have been used to treat patellofemoral instability secondary to patella dislocation.

Purpose: The aim of the study was to analyze the clinical outcome 12-36 month after MPFL reconstruction according to patient satisfaction and re-dislocation.

Methods: 26 patients (23 female and 3 men) age 14-31 with recurrence luxations of the patella were included. They all underwent MPFL- reconstruction from 2007 -2009. The patients were questioned by validated questionnaire (Kujala knee function score). Reconstruction was performed suturing the gracilis tendon autograft to the medial part of the patella with two anchors, and fixed at the anatomical MPFL insertion site on the medial femoral condyle with an interference screw.

Findings: All included patients participated. No patella re-dislocation was reported. Subluxation occurred in 2 patients (8 %). 5 patients (20%) had chronic pain at follow-up. According to surgery description, these 5 patients had cartilage injury at the time of the reconstruction. The Kujala knee function score improved overall from 44 points (range, 15 to 65 points) to 83 points (range, 60 to 99 points).

Conclusion: This study shows that MPFL reconstruction with gracilis tendon graft sutured to the medial part of the patella with two anchors provides good postoperative patellar stability and seems equal to other surgical techniques in terms of patient satisfaction. Postoperative pain seems to be related to the degree of patellofemoral cartilage injury found at surgery.

Cyst volume in the acetabulum and femoral head decrease after periacetabular osteotomy

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Background: Bone cysts in patients with hip dysplasia, is the result of degeneration or defects of the articular cartilage and elevated local stresses in the subchondral bone.
Purpose: In a series of consecutively included patients scheduled for periacetabular osteotomy (PAO), we examined how many had acetabular or femoral head cysts preoperatively and measured the volume of these cysts. 1 and 2½ years after PAO we re-measured the volume of the cysts to investigate whether the cysts developed further after PAO.
Methods: 24 females and 4 males with hip dysplasia had the hip magnetic resonance imaged (MRI) before PAO, 1 and 2½ years and after surgery. The location and number of cysts were noted and the total cyst volume in each patient was estimated with a model- based stereological method. Two angles were measured on pre- and postoperative AP radiographs: center- edge (CE) and acetabular index (AI) angle.
Findings: 11 of 28 patients had acetabular cysts preoperatively (21 cysts, mean total cyst volume/patient 3.44 cm3, SD 6.712) and 1 patient had a cyst in the femoral head (volume 8.05 cm3). One year after PAO, 13 patients had acetabular cysts (19 cysts, mean total cyst volume/patient 1.96 cm3, SD 3.97) and 2 patients had femoral head cysts (4 cysts, mean total cyst volume/patient 3.98 cm3, SD 4.10). 2½ years after surgery 13 patients had acetabular cysts (16 cysts, mean total cyst volume/patient 0.96 cm3, SD 1.70) and 2 patients had femoral head cysts (4 cysts, mean total cyst volume/patient 0.80 cm3, SD 0.72). Mean total acetabular cyst volume/patient decreased significantly from 1 year to 2½ years after PAO = 0.04. All acetabular cysts were located anterolaterally in the acetabulum except for one that was posterolateral. The femoral head cysts were positioned anterolaterally and anteromedially. The radiographic evaluation on preoperative and postoperative radiographs in the 28 hips showed that the CE angle increased from mean 13 (- 27 to 35) degrees to mean 31 (20 to 41) degrees after PAO, and the AI angle decreased from mean 18 (7 to 39) degrees to mean 2 (-4 to 10) degrees.
Conclusion: In conclusion, the radiographically measured angles demonstrated optimal surgical correction of the acetabulum at PAO. The mean total cyst volume/patient decreased significantly between 1 and 2½ years after PAO. We believe this is a result of decreased local stresses in the subchondral bone after PAO which also indicates that redirection of the acetabulum reduces the risk of progression of osteoarthritis in the operated hip.

10 year follow-up of cemented Bimetric® titanium stem in Total Hip Arthroplasty (THA)

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Background: Reports on the long-term results of cemented titanium femoral stems in THA have been conflicting. Many authors describe early aseptic loosening and revision rates of up to 25%, whilst others describe good long-term survival.
Purpose: The aim of our study was to show the 10 year follow-up results of the cemented Bimetric® titanium stem in THA with regards to aseptic loosening, stem migration and clinical outcome.
Methods: Retrospectively a cohort of 362 patients (227 women and 135 men) with unilateral THAs operated between Oct. 1991 and Dec.1997 was defined. 136 were available for a clinical and radiological 10 year follow-up examination. For the remainder data were extracted from the patient records. In all cases the cemented Bimetric® titanium stem was used, and cemented with 3rd generation cementing technique, aiming for a 2 mm cement mantle, using a distal centralizer. The mean age at the time of surgery was 74 (range 29-92) years.
Findings: 226 (62.4 %) patients died before 10 year follow-up. A part of these had sufficient data registered for calculating preoperative and 1 year postoperative Harris Hip Scores. Stem survival in this group was 220/226(97.3%). At 10 year follow-up 136 patients were alive, and 64 patients (47.1%) took part in clinical and radiological controls, mean observation time 11.4 years. 1 patient was revised due to aseptic loosening, making the survivorship of femoral stems in this group 98.4%. Harris Hip Score was good or excellent in 71.9% (46/64) and satisfactory in 21.9%, 2 patients (3.1%) were not satisfied.
Conclusion: From our mid term results it seems that good long-term results can be achieved with the cemented Bimetric® titanium stem, with a survival rate of 98.4% at 11.4 years.

Validity and feasibility of four patient reported outcome measures in the Danish Hip Arthroplasty Registry. A cross-sectional study of 6000 patients

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Background: Patient reported outcome-measures (PROs) are warranted in the total hip arthroplasty (THA) registries.
Purpose: To assess response rate, floor/ceiling effect, percentage missing items, and cost of PROs relevant to THA patients in a register setting.
Methods: 5777 primary THA patients, operated 1-2, 5-6, and 10-11 years ago. SF-12 Health Survey (SF-12), EQ-5D, Oxford 12-item Hip Score (OHS), and Hip dysfunction and Osteoarthritis Outcome Score (HOOS) were included. Cost was assessed as license requirements, fees and need for manual validation of the scanned questionnaires.
Findings: 5206/5733 (91%) patients (mean age 72 years, 59% females) responded. Non-responders did not differ from responders with regard to gender. Response rates for the PROs were 82-84%. The floor effect was <0.5% for all PROs. Ceiling effects ranged from 6% (SF-12) to 46% (EQ-5D Index). Percentage of missing items ranged from 3% (HOOS QoL and EQ-5D Index) to 15% (HOOS Pain). When applying questionnaire specific rules for missing items, a score could not be calculated for 1-6% of the PROs. The proportion of items needing manual validation ranged from 4% (EQ-5D) to 1% (SF-12, HOOS). OHS and HOOS do not acquire any license. For SF-12 administrative fee, survey reference kit, and scoring software cost altogether 1,569.90 USD. The EQ-5D can be used for free when applied to less than 5000 patients.
Conclusion: All questionnaires had very high response rates. The low floor effects and high ceiling effects can largely be explained by postoperative administration and the overall good outcome from THA. We conclude that all four questionnaires are appropriate for administration in a hip registry.

A novel method for measuring the femoral neck anteversion

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Background: Several methods exist for measuring femoral neck anteversion angle (FNAA) using CT-scans. A common problem is how to realign femur prior to actual measurement. Proposed methods in the literature are too complex for the clinical setting or differ widely in their definition of FNAA. There is no consensus as to which method is best. In this study a method is proposed, that is a modernization of Murphy et al's original work on the subject.
Purpose: To compare two methods of measuring FNAA: The method used at Odense University Hospital until recently (2D-OUH), and a new method, 3D-OUH, which realigns femur prior to measurement.
Methods: 26 CT-scanned patients: 9 men and 17 women aged 12 to 64 with a mean age of 37 years. The right side FNAA was measured twice with each method by one observer, measuring intraobserver variability. Both methods are based on the following anatomy: Femoral head center, center at level of lesser trochanter, posterior apex of the femoral condyles. The 3D-OUH method measures FNAA relatively to anatomy of femur itself, instead of the horizontal plane of the CT-scanner as with the 2D-OUH method. The intercondylary notch center of the knee and center at lesser trochanter is used in realignment.
Findings: 2DOUH significantly overestimated AV compared to 3DOUH by 4.2° (95 % CI: 2.8°;5.7°), P=0.00. The 3DOUH method had a lower variability with a Limit of agreement (LOA) of -2.1° to 2.4° against that of 2DOUH of -3.4° to 3.8°
Conclusion: Measurements made with the 3D-OUH method was significantly lower than with 2D-OUH, implying systematic bias from the way patients are positioned in the scanner. The 3D-OUH method had lower intra-observer variability. Compared to the 2D-OUH method, it is more precise, estimated by intra-observer variability alone.

Metal ions and lymphocyte counts in the bedding-in period. An RCT between Resurfacing (RHA) and ceramic on poly THA

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Background: Metal on metal articulations produce chromium (Cr) and cobalt (Co) debris, particularly when the articulations are worn in. High ion levels in the peripheral blood are indicative of excess wear, and may have local and systemic affects.
Purpose: The present RCT investigates metal ion concentrations and the relationship of Co Cr ions and lymphocyte counts during the bedding in period.
Methods: Following randomization to RHA or THA we obtained whole blood (wb), and serum (s) at baseline, 8 weeks, 6 months and 1 year. We measured Co and Cr concentrations, total lymphocyte count and sub populations. Inclination and anteversion angles of the cup were obtained from X-rays.
Findings: Nineteen patients in each group. Mean Age 57.0 y (RHA) and 54.9 y (THA) For RHA only: Mean head size: 51.7 mm, inclination: 46.0°, anteversion: 20.4° Median ions stayed below 0.2 ppb for THAs. For RHAs the ions generally were elevated at 8 weeks, followed by a slower ascent up to 1 year to 1.02 (wb Co), 1.34 (s Co), 1.31 (wb Cr) and 1.71 ppb (s Cr) ($p<0.001$). A high ion level was correlated to a small head size ($p<0.03$) a cup inclination around 45° ($p<0.04$) and females ($p< 0.02$ for Co, borderline Cr) but had no correlation to the anteversion. All lymphocyte parameters demonstrated a declining tendency during the bedding in period, only CD8+ was statistically significant ($p<0.05$). No difference was noted between the groups with no correlation between ion levels and lymphocytes.
Conclusion: We observed a general tendency for declining lymphocyte counts following surgery, but no support for the theory that metal ions suppress the lymphocytes or the CD8+ subgroup. Our findings reg. the relationship between neutral cup positioning and ion levels were unexpected

Meta-analysis on risk of reinfection by one-stage vs. two-stage revision in chronically infected hip arthroplasties

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Background: Internationally the two-stage revision is accepted as gold surgical standard for treating chronic infections following total hip arthroplasty (THA). Fast-track treatment is done by one-stage revision, which is advocated by some international centers. The optimal treatment strategy for chronically infected THA remains debated

Purpose: We aimed to investigate if one-stage revision is a relevant treatment strategy, compared to two-stage revision in terms of risk of re-infection

Methods: The meta-analysis was performed in accordance to PRISMA (www.prisma- statement.org). Studies were identified by searching Pubmed and Embase with bibliographic cross-reference. Studies were included for review if eligible according to specified criteria. Analysis was done using Comprehensive Meta- Analysis software version 2.0. We estimated risk of reinfections (95% confidence intervals) by random-effects model. Statistical significance accepted at $p< 0.05$

Findings: We used data from 36 eligible studies, pooling 1304 patients with chronically infected THA and 127 registered reinfections following reimplantation by either one- or two-stage revision. Reinfection occurs with an estimated risk of 11 % (9.6 – 13 %). Stratifying by treatment strategy, reinfection in one- stage revision occurs with an estimated risk of 13 % (10% -17%) and in two- stage with an estimated risk of 10% (8.5% - 13%) which did not differ significantly (p-value 0.173). Additional subgroup or sensitivity analysis did not alter this result. The methodological quality was considered low in all 36 studies

Conclusion: Although two-stage revision is the gold standard in treating chronic infections in THA - the quality of evidence is generally poor – and showed no superiority over one-stage revision

Ortostatic intolerance during early mobilization after total hip arthroplasty

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Background: Early postoperative mobilization is a cornerstone in fast-track hip arthroplasty (THA). However, postoperative orthostatic intolerance (OI) may delay early recovery or lead to complications. OI have been attributed to impaired fluid balance, postoperative anaemia or the use of opioid analgesics. However, the prevalence of OI or the association between OI and these factors has not been established after THA

Purpose: We evaluated the orthostatic function and cardiovascular responses to mobilization before and after surgery in fast-track THA patients.

Methods: Orthostatic tolerance was evaluated in 26 patients scheduled for THA and undergoing spinal anaesthesia, before, 6 and 24 hours after surgery. An opioid sparing analgesic regime was administered. Systolic (SAP)- and diastolic (DAP) arterial pressure, heart rate (HR) and cardiac output (CO) were measured non-invasively using the Nexfin® system and cerebral (ScO2) and muscular (SmO2) tissue oxygenation were recorded using non- infrared spectroscopy (Invos®).

Findings: No patients demonstrated OI before surgery, whereas 11 (42%) and 5 (19%) patients had OI 6 and 24 hours after surgery, respectively. 3 (12%) patients had ortostatic hypotension, but no symptoms of OI 6 hours after surgery. Before surgery, SAP, DAP and HR increased ($P < 0.05$) while CO remained stable upon standing. At 6 and 24 hours after surgery SAP, DAP, CO and ScO2 decreased ($P < 0.05$) in patients with OI but remained stable in patients without OI. There were no association between postoperative Hb or opioid use and OI.

Conclusion: Early postoperative OI is common after THA and is associated with a diminished cardiovascular response to standing and decreased cerebral oxygenation. Further research on OI after THA should focus on fluid dynamics and haemodynamic adaptation to early mobilization.

Periacetabular osteotomy in the treatment of anterior femuroacetabular impingement (FAI) caused by acetabular retroversion

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Background: The retroverted acetabulum can lead to FAI and has been acknowledged as a pre-osteoarthritic (OA) abnormality. This abnormality can be corrected by a periacetabular osteotomy (PAO) and reorientation of acetabulum

Purpose: Was to evaluate disease specific outcome (HHS), health related quality of life (EQ5D), achieved radiographic corrections, postoperative activity, satisfaction and any complications related to surgery

Methods: Since may 2004 27 PAOs were done due to acetabular retroversion. Inclusion criteria were symptomatic hip pain and radiographic proven retroversion of the acetabulum. The correction consisted of a combined flexion/internal rotation and, if necessary, an adduction. In order to achieve a sufficient correction, a new modification of the procedure has been introduced, consisting of removal of a wedge of iliac bone. Eigth patients were excluded from this analysis due to combined surgery or a follow up shorter than 6 months. HHS, EQ5D, pain on a VAS-scale after 30 min of walk and intraoperative variables were registered prospectively. The acetabular retroversion in terms of "figure of 8" and "posterior wall sign" was evaluated and quantitated on pre- and postoperative pelvic radiographs in addition to the lateral center edge (LCE) – and acetabular index (AA)angle. In one case preoperative radiographs were no longer available. Finally a questionnaire was sent to evaluate the patients subjective estimation regarding level of activity , "willingness to repeat the procedure" and EQ5D.

Findings: No major complications were encountered. Average (95% cfi) HHS improved from 72 (69-75)-96 (93-100), EQ5D from 0.71(0.65-0.76) – 0.92(0.86- 0.97) and pain from 6.3(5.4-7.2) – 0.6 (0.1-1.0) ($p<0.05$). Average "figure of 8" improved from 0.43(0.38-0.48) – 0.08 (0.02-0.13), the "posterior wall sign" improved from 0.7(0.63-0.78) – 0.93 (0.85-1.0) ($p<0.05$). Only 3 cases had preoperative abnormal LCE and AA angles and were all corrected sufficiently. 95% were willing to repeat the procedure and 74% experienced a better level of activity.

Conclusion: PAO and reorientation of acetabulum is an effective method to treat symptomatic femuroacetabular impingement due to acetabular retroversion. Whether it can prevent OA has to be evaluated in long term studies.

Increased wear of polyethylene coupled with yttria-stabilized zirconia femoral heads. A 10 year follow-up and clinical assessment

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Background: Experimental studies predicted zirconia femoral heads to reduce the wear of conventional ultra high molecular weight polyethylene (UMHWPE) in total hip arthroplasty (THA). Later on, it was discovered that frictional heating and mechanical stresses on THA bearings surfaces during clinical use resulted in phase transformation of yttria-stabilized zirconia (YSZ) and initiated surface roughening of the femoral head.
Purpose: We hypothesized increased PE wear- rate and poorer clinical outcome at 10 years for PE coupled with YSZ femoral heads in comparison with PE coupled with Cobalt-Chrome (CoCr) femoral heads.
Methods: 71 patients (76 hips) at a mean age of 52 years (range, 24 – 64) were treated by one surgeon for hip arthritis by primary THA during 1996-1999. 61 patients (66 hips) participated in a 10 year follow-up (nonparticipants: 7 dead, 2 early revisions, and 1 with poor health). There were 32 hips with CoCr and 34 hips with YSZ femoral heads. Components were cementless HA coated MH-Solid Finned Ringloc Shells (Biomet), Arcom PE liners (Biomet), cemented Exeter stems (Stryker), and 28 mm CoCr and YSZ femoral heads (Stryker). The two cohorts were compared at 10 years for two- dimensional (2D) linear PE wear, osteolysis, clinically by three questionnaires (Self-report Harris Hip Score (HHS), SF-36, and EQ-5D) and demographic data.
Findings: Demographic data was comparable. At 10 years, the 2D linear PE wear-rate with YSZ femoral heads (n = 34) of 0.16 mm/year, SD 0.05 (range, 0.06 – 0.30) was 25% higher ($P < 0.01$) than with CoCr femoral heads (n = 32) of 0.12 mm/year, SD 0.06 (range, 0.03 – 0.30). Variance was similar ($P = 0.31$). Maximum 2D linear wear was 2.8 mm in both cohorts. There were 2 revisions in the YSZ group within the observation period ($P = 0.26$). There were no evident cup migration and osteolysis was minimal. In the group with YTZ femoral heads (n = 33) HHS was 90 and EQ-5D was 0.88 ($P > 0.25$). In the group with CoCr femoral heads (n = 27) HHS was 87 and EQ-5D was 0.87 ($P > 0.25$). For SF-36 the two physical dimensions were poorer for the two cohorts compared with the Danish background population aged 45 – 54 years) ($P < 0.01$). In general 93% of the patients (n = 60) were satisfied with the THA.
Conclusion: YSZ femoral heads resulted in a 25% higher PE wear-rate compared with CoCr femoral heads, but it did not influence the THA revision rate, the health-related life-quality, and disease- specific measures at 10 years of follow- up. Clinical long-term follow-up of YSZ femoral heads do not reflect the positive wear-profile, which experimental studies predicted. YSZ femoral heads have now all but completely disappeared from the market, however, thousands of patients are still implanted with YSZ femoral heads and clinicians should pay attention to wear-related problems of in these patients.

Increased polyethylene wear in hydroxyapatite coated Mallory-Head acetabular components

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Background: An increasing number of hip prosthesis is inserted without bone cement. Experimental research has shown that hydroxyapatite (HA) coated implants are strongly fixated in the bone, which is believed to reduce the likelihood of prosthetic loosening. However, in recent years, there has been much debate about the role of HA particles in third- body polyethylene (PE) wear and formerly we have shown the revision rate to be high among older-design HA coated cups.
Purpose: We hypothesized increased PE wear-rate using HA coated acetabular components in comparison with non-HA coated components (control group).
Methods: We performed a retrospective comparative clinical study based on two patient populations identified in the Danish Hip Arthroplasty Registry (October 2006). All patients had primary total hip arthroplasty (THA) between 1997 and 2001 with cementless Mallory- Head acetabular components. One group received HA coated acetabular components (75 patients, 77 hips). The other group received identical components without HA (70 patients, 73 hips). In all cases the liner was similar and 28 mm metal femoral heads were used. All patients were invited for a radiographic follow-up in 2007. The AP radiographs were analysed for polyethylene wear using the PolyWare software. All cases of non-responders, stem revisions, dislocations and < 5 years of follow-up were excluded from the analysis.
Findings: The 2D linear PE wear-rate of 0.18 mm/year (SD 0.09) was higher ($P<0.001$) in the group with HA coated cups ($n = 54$) compared with 0.12 mm/year (SD 0.07) in the group of non-HA coated cups ($n = 35$). The Effect size of the difference in linear PE wear-rate, established as Cohen's d, was large (0.9). The follow-up was similar ($p=0.11$) in the HA group (7.2 years) versus the non-HA group (7.6 years). There was no case-mix concerning distribution of gender and operated side in the groups; however, the mean age was lower ($P=0.001$) in the HA group (57 years) compared with the non-HA group (63 years).
Conclusion: We found a significant increased PE wear rate in HA coated acetabular components at midterm follow-up. The patients with HA coated cups were younger on average, and this might in part explain the findings. Still an effect size of 0.9 is large and should raise concern and supplement considerations in future clinical decisions. A randomized (RSA) study on newer type cross linked polyethylene liners is recommended to bring about more information on the clinical performance and longevity of HA coated acetabular components.

Different responses to hypoxia of mesenchymal stem cells compared to chondrocytes

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Background: Articular cartilage is a specialized tissue in which the native chondrocytes are exposed to low oxygen tensions. This hypoxic environment is essential for the chondrogenic viability. Hypoxia inducible factors (HIFs) are believed to play an essential role in the adaption to this environment. The most commonly used treatment for cartilage defects is microfracture, which relies on mesenchymal stem cells (MSCs) to differentiate into chondrocytes for subsequent cartilage production.
Purpose: The aim of this study is to investigate the response of hypoxia on normal and differentiating MSCs compared to native chondrocytes.
Methods: Three cell cultures were used: 1. Human chondrocytes; 2. Immortalized (TERT-) MSCs in chondrogenic differentiation medium (diff); 3. TERT-MSCs in standard medium(std). The three groups were divided into three oxygen tensions: 21%, 15%, and 5%. They were cultured in groups for 1, 2, 7, and 14 days. Quantitative gene expression analysis was obtained using qRT-PCR and protein synthesis was measured with ELISA. Statistics were performed with ANOVA with repeated measures.
Findings: Chondrocytes and TERT-MSCs(diff) did not show an increase in HIF-1alpha and HIF- 2aplha with lowering of oxygen from 21% to 5%. However, TERT-MSCs(std) showed a significant 3-fold increase. The expression of VEGF in chondrocytes showed 5-fold increase while TERT-MSC(diff) showed a 8- fold increase and TERT-MSCs a 12-fold increase.
Conclusion: Vascularization of regenerating cartilage is a main contributor to the generation of fibrous tissue and failed cartilage formation. This is the first study to describe the unfortunate response of stem cells compared to chondrocytes, which might contribute significantly to the understanding of impaired regeneration of cartilage using microfracture.

Bioreactor activated graft material for early implant fixation in bone

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Background: Combined incubation of a composite scaffold with bone marrow stromal cells in a perfusion bioreactor, could make up a novel hybrid graft material with optimal properties for early fixation of bone to implant.
Purpose: The aim of this study was to create a bioreactor activated graft (BAG) material, which can induce early fixation of bone to implant, similar to that of allograft.
Methods: Mononuclear cells were isolated from the bone marrow of 8 female sheep, and injected into a perfusion bioreactor with poly-lactic acid (PLA 12%) coated scaffold granules (HA/â-TCP). Hybrid material was incubated in the bioreactor for 2 weeks. Porous titanium alloy implants (diameter=length=10mm) were inserted bilaterally in each of the distal femurs of the sheep; thus 4 implants in each sheep. The concentric gap (2 mm) surrounding the implant was filled with 1) BAG (autogenous), 2) granules, 3) granules+bone marrow aspirate (BMA, autologous) or 4) allograft. The sheep were euthanized after 6 weeks. Push-out tests were performed to assess implant fixation.
Findings: Results were assessed by One-way ANOVA. P-values less than 0.05 were considered significant. No significant differences regarding failure energy (kJ/m2, p=0.070) could be seen between the groups. Shear stiffness (MPa) was significantly higher for the allograft group, p=0.002. The BAG showed up to 1.5 and 2.4 folds better properties regarding shear stiffness than the granules alone or the granules+BMA respectively. The BAG also had up to 1.8 and 5.3 fold higher failure energy than the granules alone or the granules+BMA respectively.
Conclusion: The present study is the first to show an effect of bioreactor activated bone substitute on mechanical fixation. However the mechanical fixation did not reach that of allograft. Probably, an extended observation time could increase the mechanical fixation of implants treated with the bioreactor activated graft.

Periosteal augmentation of allograft bone and its effects on implant fixation

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Background: Hip and knee arthroplasty can present surgeons with difficult bone loss. The use of morselized allograft is a well-established way of optimizing early implant fixation, but integration is not always complete or immediate.
Purpose: We hypothesized that augmenting the allograft bone by adding minced autograft periosteum could provide an added signal for osteogenic differentiation, and possibly add pluripotent lining cells for aiding initial bone healing. This was tested by comparison of early implant fixation of the two groups.
Methods: Following approval of the Institutional Animal Care and use Committee we implanted a cylindrical (10x6 mm) porous-coated Ti implant in each distal femur of 12 dogs observed for 4 weeks. The implants were surrounded by a circumferential gap of 2.5 mm impacted with a standardized volume of morselized allograft. On the intervention side, the morselized allograft was augmented by 1cm2 minced periosteum harvested from the proximal tibia. The power in the study allowed detection of relative differences of 30% T-test was applied, p-value < 0,05 considered statistically significant.
Findings: Biomechanical fixation tested by axial push- out revealed no change in fixation with the use of periosteal augmentation. Control vs. periosteal augmentation: Shear strength (MPa) 4,43 vs. 4,30 (p=0,788), stiffness(MPa/mm) 20,12 vs. 19,42 (P=0,834) and energy absorption(kJ/m2) 0,90 vs. 0,87 (P=0,619).
Conclusion: In this experimental model and implant conditions, augmentation of the allograft bone by autograft periost did not improve mechanical implant fixation. Other volumes of periosteum or local (attached) flap of periosteum can be studied in the future, but the present study does not support the use of periosteal augmentation of allograft bone in clinical practice.

Differences in expression of microRNA in human lumbar discs

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Background: Recent studies have pointed towards a genetic contribution to the development of disc degeneration. In spite of identification of candidate genes, the complete understanding of the genetic role in disc degeneration has not been obtained. MicroRNA's (miRNA's) regulate protein translation through mRNA binding, and more than 800 miRNA's have been identified in humans.
Purpose: The purpose of the present study was to isolate miRNA from human lumbar intervertebral discs and assess the difference in miRNA expression between the annulus fibrosus and nucleus pulposus.
Methods: Intervertebral discs were obtained from twelve patients undergoing anterior interbody fusion for degenerative disc disease of the lumbar spine. The interverbral discs were immediately stored in RNA-Later, and frozen at -80 degrees Celcius. After RNA extraction, global miRNA expression analysis was performed using the Affymetrix GeneChip® miRNA array.
Findings: From 100 mg tissue it was possible to extract 2 microg RNA. 27 miRNA's had a higher expression in the fibrosus and 10 had the highest expression in the pulposus. One miRNA, 147b, was highly expressed in annulus fibrosus. One target gene for this miRNA is brain derived neurotrophic factor (BDNF), a member of the "neurotrophin" family of growth factors that has been associated with degeneration of human intervertebral discs.
Conclusion: To our knowledge, this is the first time miRNA´s have been demonstrated in human intervertebral lumbar discs. Furthermore we found differences in expression of miRNA between the nucleus pulposus and annulus fibrosus. In vitro transfection studies in untransformed fibroblasts will determine the functional role of these miRNA´s.

The effects of glucocorticoid on microarchitecture, collagen, mineral and mechanical properties of sheep femur cortical bone – Validation of large animal model for tissue engineering and biomaterial research

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Background: Osteopenia in sheep has been successfully induced by glucocorticoid treatment and the changes in properties of cancellous bone were comparable with those observed in humans after long-term glucocorticoid treatment. However, the influence on cortical bone has not been thoroughly elucidated.
Purpose: This study aimed to investigate the influence of glucocorticoid on sheep cortical bone after long-term treatment. Specifically, we quantify the microarchitecture, mechanical properties, collagen and mineral quality of sheep cortical bone. We hypothesized that glucocorticoid treatment also had significant influences on cortical bone that might increase risk of fracture.
Methods: In this study, 18 female skeletal mature sheep were randomly allocated into 3 groups of 6 each. Group 1 (glucocorticoid-1) received prednisolone treatment (0.60 mg/kg/day, 5 times weekly) for 7 months. Group 2 (glucocorticoid-2) received the same treatment regime followed by observation of 3 months without treatment. Group 3 was left untreated and served as the controls. All sheep received restricted diet with low calcium and phosphorus. At sacrifice, cortical bone samples from the femur midshaft of sheep were harvested, micro-CT scanned and tested in 3 point bending and in tensile. Bone collagen and mineral were determined.
Findings: Cortical porosity was significantly increased in the glucocorticoid-2 compared with the glucocorticoid-1 and the controls. Apparent density was significantly decreased in the glucocorticoid-2 compared with the glucocorticoid-1. Collagen content was significantly increased in the glucocorticoid-2 compared with the glucocorticoid-1 and the controls. Bone mineral content did not differ between the groups. Neither the three-point bending mechanical properties, nor the tensile mechanical properties differed significantly between the groups, while there was a trend towards decreasing bending mechanical properties in the glucocorticoid-2.
Conclusion: In conclusion, 7 months glucocorticoid treatment with malnutrition had significant impact on cortical microarchitecture of sheep femur midshaft. These changes occurred particularly 3 months after the glucocorticoid cessation suggesting a delayed effect of glucocorticoid on cortical bone. Thus, changes in cortical bone beyond cancellous bone might further increase fracture risk.

Intra- and interrater reliability of pressure pain threshold in children with orthopedic disorders

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Background: Children undergoing orthopedic surgery are often in pain. Assessment of pain in children can be difficult and alternative tools for assessing the threshold for pain in children would be an advantage. Pressure algometry can be used to assess pain thresholds.
Purpose: It has been documented that children with a history of growing pains or unspecific abdominal pain have lower pressure pain threshold than healthy children. This study determines the intra- rater/inter-rater agreement of pressure pain thresholds in children with orthopedic disorders.
Methods: 50 children aged 4-12 years attending the orthopedic outpatient clinic at Aarhus University Hospital underwent pressure algometry examination. To determine both the intra-rater and inter-rater agreement 20 were examined twice and 20 were examined by two different investigators. Ten children were only examined once. A Somedic „µ pressure algometer with a rubber surface of 1 cm2 was applied to the skin with a gradually increasing force. Pain pressure threshold is defined as the minimum pressure applied that can induce pain. The child was instructed to say ¡¥stop¡ı when the sensation of pressure changed into a sensation of pain. The thenar of the dominant hand and the back of the calf were examined.
Findings: The mean age of the children was 8.2 years. The pressure pain threshold was calculated as the mean of two successive thresholds. Descriptive statistics was used for demographic data and the Bland-Altman test was used to test inter-rater and intra- rater reliability. The mean pressure pain threshold was 183 kPa at the thenar and 179 kPa at the leg. Bland-Altman plots revealed very good intrarater reliability and good interrater reliability between the two examiners. Pressure pain thresholds were significantly lower both at the leg (difference: 41.4 kPa, SD: 57.5, $p< 0.01$) and at the thenar (difference: 29.4 kPa, SD: 42.7, $p<0.01$) for values obtained by reader 1 when compared with thresholds obtained by reader 2.
Conclusion: Pressure algometry has good intra-rater reliability and satisfactory inter-rater reliability and may be used as a supplemental tool for evaluating pain and pain thresholds in children with orthopedic disorders in relation to surgery. Furthermore preoperative algometry may help identify which children are at risk of severe postoperative pain.

Active immunization against Staphylococcus aureus (ica+) periprosthetic osteomyelitis in rats

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Background: Staphylococcus aureus may form biofilms on metallic and polyethylene implants causing osteomyelitis infections difficult to eradicate from bone, joints and surrounding tissues. The biofilm formation is linked to the ica- gene and leads to significant resistance to antibiotics.
Purpose: We have searched for a synthetic PNAG oligosaccharide conjugate vaccines to prevent osteomyelitis around implants in a rat knee-implant model.
Methods: Fourteen Sprague-Dawley rats were operated with a non-constrained knee prostheses and divided into a vaccine group (N=6) and a control group (N=8) . The two groups received a bacterial inoculums of 103 S.aureus, ica+, MN8 in the tibia and the femur marrow before insertion of the prosthesis. The vaccine group received active immunization with a synthetic oligosaccharide 9G1cNH2 conjugated to tetanus toxoid given 3w, 2w and 1 w before implantation of the prostheses. After two weeks , the animals were sacrificed and all the specimens were prepared for analysis. Blood analysis and radiological findings were collected.
Findings: The vaccine group showed a significant effect in all four parameters as shown by the clinical data. G/n Microb 1AG X-ray Path. V/6 1.6 273 2.5 4.0 C/8 2.3 383 5.3 8.1
Conclusion: The animal model is suitable to reliably induce implant osteomyelitis and demonstrated that active immunization (vaccination) can significant reduce the consequences of infection from an ica+ bacterial osteomyelitis. In the vaccine group, with the biofilm producing bacteria, a trend towards an effect is seen.

Bone remodeling around HA-coated acetabular cups: DEXA study with an 8-year follow-up in a randomised trial

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Background: The aim of this study was to compare clinical outcome and changes in bone mineral density around a specific cup with and without HA coating in cementless THA. The previous, 3-year follow-up, study found no difference with regard to bone mineral density changes or clinical outcome
Purpose: The aim of this study was to compare clinical outcome and changes in bone mineral density around a specific cup with and without HA coating in cementless THA. The previous, 3-year follow-up, study found no difference with regard to bone mineral density changes or clinical outcome
Methods: This controlled randomized study includes 100 patients who underwent unilateral cementless total hip arthroplasties from October 1998 to May 2000. All patients suffered from primary osteoarthrosis and had no competing medical conditions. Randomisation was performed between porous coated Trilogy, standard cup, and Trilogy Calcicoat (HA/TCP coated), study cup. The cup was inserted in press-fit fixation. The femoral component was a cementless porous coated titanium alloy stem (Bi- Metric), with a modular 28-mm CrCo head. The Harris Hip Score (HHS) and bone mineral density (BMD), determined by DEXA scanning, were used to study the effect. DEXA measurements were performed with a dual energy X-ray absorptiometer using the model of four regions of interest (ROI) – 'the Wilkinson regions'.
Findings: 19 patients were lost to 8-year follow- up: 13 patients died of unrelated causes, 4 underwent revision surgery and 2 were lost because of other reasons. Of the 81 patients who were participating in the follow-up 40 had Trilogy Calcicoat (HA/TCP coated) cup and 41 - porous coated Trilogy cup. The Harris Hip Score rose from 53 to 96 in the study group (Trilogy Calcicoat) and from 48 to 92 in the control group. Measurements of periprosthetic bone mineral density in the ROI 1, 3 and 4 revealed no difference between the two groups after 8 years. However, measurements in the ROI 2 were significant favourable to porous coated Trilogy cup.
Conclusion: We found no difference with regard to clinical outcome in 81 patients followed up for 8 years after randomisation between HA or standard porous coated cups. Measurements of periprosthetic bone mineral density were significant favourable to porous coated Trilogy cup in one of the ROI.

The effect of Mild Hyperthermia on Extravasation of USPIO Particles in a murine tumor model

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Background: Ultrasmall Iron Oxide (USPIO) particles have superparamagnetic characteristics. It is possible to attach various compounds to USPIO particles such as chemotherapy and silencing RNA sequences. Mild hyperthermia can disrupt tumor vessel endothelial barrier allowing USPIO particles to diffuse into the interstitial space of tumor.

Purpose: In this study we have investigated the effect of various lengths of localized mild hyperthermia on the extravasation of i.v injected USPIO particles in a murine tumor.

Methods: Tumor model Mammary carcinoma tumors were grown in the rear right foot of CDF1 mice. Hyperthermia Heat treatment was performed locally by submerging the tumor bearing foot in a circulating water bath at 41.5 °C. Animals were randomized into four groups 1, USPIO particles only; 2, USPIO particles and 5 min of HT; 3, USPIO particles and 30 min of HT and 4, USPIO particles and 60 min of HT. N=9 in each group. Animals were MR scanned prior to injections and after 90-, 390- and 1140 min.

Findings: Change in T2* in response to heating length shows a significant difference between animals heated for 30- and 60 minutes compared to animals heated for only 5 minutes and controls ($p<0.05$). T2* decreases rapidly by the time of the first scan (90min) and incline slightly on scans 390, 1140 min. After 1140 min (24h) the T2* value in the control group, is 39.5 +/- 4.3 compared to 27 +/-3.2 in the group heated for 60 minutes and after 90 min the values are 31+/- 5.6 and 10 +/-2.1.

Conclusion: The heating length seems to be important when it comes to the amount of USPIO particles being trapped in the tumor. The optimal heating length seems to be 30 minutes, with very little benefit of going up to 60 minutes.

Demineralised bone matrix and human cancellous bone enhance fixation of titanium implants

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Background: Allogenic bone graft has been considered as gold standard for replacement of bone stock in the revision joint arthroplasty. However, the reduced heeling response and the limited supply are clinical challenges. The use of osteoinductive materials such as demineralised bone matrix (DBM) alone or in combination with allograft or commercially available human cancellous bone (CB) may substitute allograft. To date no clinical investigations of the influence of DBM and CB on implant fixation has been done. Only few preclinical studies are available

Purpose: The purpose of this study was to investigate the effect of DBM alone or with CB and allograft on the fixation of porous-coated titanium implants

Methods: DBM100 and CB produced from human tissue were included (IsoTis OrthoBiologics, Inc. USA). Both materials are commercially available. DBM granules are placed in pure DBM and don't content any other carrier. Titanium alloy implants (Biomet Inc.) of 10 mm in length and 10 mm in diameter were inserted bilaterally into the femoral condyles of 8 skeletally mature and elderly sheep. Thus four implants with a concentric gap of 2 mm were implanted in each sheep. The gap was filled with: DBM; DBM/CB with ratio of 1/3; DBM/allograft with ratio of 1/3; or allograft (Gold standard), respectively. Standardised surgical procedure was used. At sacrifice, 6 weeks after surgery, both distal femurs were harvested. The implant fixation was evaluated by mechanical push-out testing to test shear mechanical properties between implant and the host bone, and by histomorphometric analysis

Findings: The strength among the DBM/CB, the DBM/allograft and allograft groups was not statistically different. The strength of the DBM alone was 0.026 MPa, which was statistically significant lower than the other three groups. The bone ingrowth in the DBM group was statistically significant lower than the other three groups, while the volume fraction of new bone showed no significant different among all of the groups.

Conclusion: Our data have revealed that by adding DBM to allograft or to CB resulted in comparable mechanical properties relative to the gold standard, allograft. We found no early effect of DBM alone on the fixation of porous coated titanium implant in this animal model, while the long term effects have to be investigated. The combination of DBM with CB, which can be used off the shelf, may represent an alternative to allograft

A prospective randomized trail between Transforaminal (TLIF) and instrumented posterolateral fusion (PLF)
A one year follow- up

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Background: Circumfentrical fusion is superior to PLF concerning functional outcome, fusionrate and saggital balance, Christensen 2002, Videbaeck 2006.Need of anterior support was questioned 2007 Ekman, comparing PLIF/PLF. In 2009 Neumann compared TLIF to PLF,outcome was significantly in favor of TLIF.
Purpose: The aim of the present study was to show whether these benefits also could be found in a Transforaminal interbody fusion group (TLIF) compared to a normal posterolateral fusion group (PLF). Since TLIF theoretical implicate the benefits of 360 degrees fusion, by less invasive surgery, and thereby less morbidity.
Methods: During 01.11.2003-.01.11.2008 100 pt`s were prospectively randomized to either Transforaminal instrumented fusion or Postero lateral instrumented fusion. The TLIF group was operated using TSRH(Medtronic)and Implex (Zimmer) and allograft. The PLF group was operated using TSRH (Medtronic) and allograft. Inclusions criteria were patients with segmental instability due to disc degeneration, former disc herniation, spondylolisthesis less than grade 2. All patients functional outcome was registered prospectively, and after one year using Dallas Pain questionnaire (DPQ), SF-36, and Low Back pain questionnaire.
Findings: Sex ratio 40 men and 58, women. 51 patients had TLIF and 47 PLF. Mean age TLIF/PLF was 49/45. No statistic difference in outcome between the two groups at one year could be detected, concerning, daily activity, work leisure, Anxiety/depression, social interest. No statistical difference could be seen between groups concerning Back pain or Leg pain. Boths groups had significant improvement in functional outcome, back pain, and leg pain after one year compared to preoperative. Daily activities $p > 0.0002/0.00001$, Back pain $> 0.00001/0.00001$, Leg pain $> 0.0007/0.0002$. Operation time in the TLIF group was significant higher $p < 0.00001$, mean 228 min TLIF group, 180. min PLF group The blood loss was significantly higher in the TLIF group compared to the PLF group $p > 0.0011$ mean 776 ml (TLIF), 437 ml (PLF). No difference in radiological fusion after one year. Patients satisfaction after 1 year was, 75 percent overall,, 78 % (TLIF), 73 %(PLF).
Conclusion: Spinal fusions significant improve patient`s Functional outcome, Back Pain and Leg pain after one year. No statistical significance difference in functional outcome, Back or Leg pain could be found between Transforaminal group and Posterolateral fusion group after one year.

Can "high flex" be achieved and does it matter in total knee arthroplasty? A randomized, controlled trial

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Background: Pain free range of motion (ROM) is a cornerstone in successful total knee arthroplasty (TKA). The achievement of a high degree of knee flexion is thought to improve the activity in daily living and possibly the patient satisfaction.
Purpose: The purpose was to compare ROM, patient satisfaction, pain, "feel" of the knee, and activities of daily living between a standard posterior cruciate- retaining TKA and a "high flex" posterior-stabilized TKA.
Methods: The study is a randomized, single-blinded, controlled trial in which patients undergoing one-stage bilateral TKA randomly had a standard AGC (Biomet®) cruciate-retaining TKA in one knee and a High-flex LPS (Zimmer®) posterior-stabilized TKA in the contra lateral knee. At follow-up 6 weeks, 3, 6 and 12 months postoperatively, the ROM, satisfaction, pain, "feel" of the knee, and the abilities in daily activities were assessed. The study group consisted of 33 patients (mean age: 67.2 yrs). The knees had comparable preoperative ROM.
Findings: At 1-year follow-up we found a significantly higher degree of knee flexion of 7°, both active and passive, in the "high-flex" group (p= 0.001). The "high-flex" LPS TKA showed a mean active flexion of 121° (range: 105°-140°) and passive flexion of 127° (range: 107°-146°). In both groups the median VAS pain score was 0, the median VAS satisfaction score was 9, and the median VAS score of the patient "feel" of the knee was 9 at 1-year follow-up. Further, there were no significant differences between the groups in the performance of daily activities.
Conclusion: The "high-flex" TKA showed increased knee flexion, but no significant differences in patient related outcomes were found. This suggests little clinical relevance of the difference in knee flexion as pain free ROM and high patient satisfaction were achieved with both TKA's.

Effect of Preoperative Methylprednisolone on Pain and Recovery after Total Knee Arthroplasty: A Randomized, Double-blind, Placebo-controlled Trial

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Background: Several postoperative clinical symptoms including pain are related to the inflammatory stress response caused by the surgical trauma. Glucocorticoids may provide positive analgesic effects by suppressing the inflammatory response as demonstrated in many procedures. Unfortunately, no data exists in total knee arthroplasty (TKA), where inflammation and pain is dominant.
Purpose: We hypothesized that a single, high- dose of methylprednisolone (MP) would improve acute, postoperative analgesia after TKA.
Methods: Patients scheduled for unilateral, primary TKA were consecutively included in a randomized, double-blind, placebo- controlled trial receiving preoperative MP 125 mg IV or placebo (saline). The primary endpoint was pain after walking 5 meters, and secondary endpoints were pain at rest, pain upon 45° flexion of the hip with the leg straight, and pain upon 45 ° knee flexion. Assessment was performed preoperatively and 2, 4, 6, 24, 28, 32 and 48h after surgery, and in a questionnaire from day 2 to 10, and at follow up on day 21 and day 30. Tertiary endpoints were postoperative nausea and vomiting (PONV), C-reactive protein (CRP), sleep quality, fatigue, rescue analgesic- and antiemetic requirements, length of stay (LOS) and side effects.
Findings: Forty-eight included patients (24 in each group) all completed the trial. Pain scores were significantly lower in the MP group up to 32h postoperatively. Summarized pain scores (2-48h) were lower for all assessments: pain after walking ($p=0.0002$); pain at rest ($p=0.002$); pain upon flexion of the hip ($p=0.016$); and pain upon knee flexion ($p=0.001$). Fewer patients required rescue sufentanil in the PACU ($p=0.017$) and oxycodone requirement was lower from 0-24h ($p=0.012$). PONV-frequency and consumption of antiemetic was reduced ($p<0.05$), and CRP was lower at 24h ($p=0.00003$). Fatigue was reduced throughout the day of operation ($p=0.04$), whereas sleep quality was worse the first postoperative night ($p=0.012$). No side effects or complications were observed in other respects. No influence on LOS was seen, median 2 days, inter quartile range 2-3 (in both groups), and no prolonged improvements were found on later recovery throughout the 30-day period.
Conclusion: MP 125 mg IV before surgery improves postoperative analgesia and immediate recovery after TKA even when combined with a multimodal oral analgesic regime. These findings call for studies on a larger scale to address the occurrence of rare, but potential serious adverse effects.

Local infiltration analgesia for acute pain relief in hip arthroplasty: Do we need it? A randomized, double-blind, placebo-controlled trial in 120 patients

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Background: High-volume local infiltration analgesia (LIA) is widely applied as part of a multimodal pain management strategy in total hip arthroplasty (THA). However, methodological problems hinder exact interpretation of previous trials, and the evidence for LIA in THA is questionable.
Purpose: We aimed to evaluate if intraoperative high-volume LIA, in addition to a multimodal oral analgesic regime, would further reduce acute postoperative pain after THA.
Methods: Ethics committee approval was granted. One hundred twenty patients scheduled for unilateral, primary THA using spinal anaesthesia were included in this randomized, double-blind, placebo- controlled trial receiving high-volume (150 ml) infiltration with ropivacaine 0.2% with epinephrine (10µg ml-1) or saline 0.9% in the wound intraoperatively. The multimodal oral analgesic regime was instituted preoperatively and consisted of slow release acetaminophen 2g, celecoxib 400mg and gabapentin 600mg. Rescue analgesic consisted of oral oxycodone. The primary endpoint was pain during walking (5 meters) up to 8h after surgery. Secondary endpoints were pain at rest, pain upon 45° flexion of the hip with straight leg and cumulated consumption of oxycodone. Pain was assessed repeatedly the first 8h after surgery using the 100mm visual analog scale. Non-parametric statistics with post hoc Bonferroni correction for repeated measures was applied.
Findings: Pain scores were low for all pain assessments (median around 20 mm) and did not differ between the ropivacaine and the placebo group ($p>0.05$). Consumption of rescue oxycodone and summarized (added) pain scores (2-8h) did not differ between groups ($p>0.05$).
Conclusion: This study demonstrated that a multimodal oral analgesic regime with gabapentin, celecoxib and acetaminophen caused low acute postoperative pain following THA, and LIA did not further improve analgesia. Positive results reported in previous trials may be due to a systemic analgesic effect of NSAID added to the LIA-mixture (but not in the control group). We cannot rule out that LIA may have an analgesic effect with a less comprehensive oral regime or in selected patients (high pain responders).

Preheating of cemented femoral component in THA. Prospective randomized study using RSA, DXA and clinical scores

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Background: Recently published biomechanical studies showed that preheating of femoral component reduces the cement porosity on prosthesis-cement interface and enhances the interfacial shear strength. This might increase the stable fixation of stem in-vivo.
Purpose: The aim of the study was to compare the migration rates, measured by radiostereometry when cementing matt- surfaced Ti femoral component preheated to 40° C with the same stem of room temperature. Secondly, we aimed to compare the periprosthetic bone changes and clinical outcomes of stems during the 2 years follow-up period.
Methods: We designed a prospective randomized double-blinded study to compare the migration rates of a preheated (40°C) and non-preheated stem, using radiostereometry (RSA). The periprosthetic bone density and clinical outcomes were also registered. Eighty patients undergoing hybrid hip arthroplasty with cemented matt- surfaced Ti stem (Bi-Metric®, Biomet) were randomized to two treatment groups with 40 in each. The patients were examined using RSA, DXA, VAS and Harris Hip Score (HHS) during 2 years follow-up. Migration of femoral head centre, prosthesis tip and cement mantle's translations were compared at 3, 12 and 24 months.
Findings: Migration rates of both femoral head centre and tip was reduced for preheated stems compared with non- preheated at prosthesis-cement interface. The median femoral head subsidence for the preheated group was -0.06mm vs. -0.1mm the control group (p=0.01) at 3 months. This difference remained at the following examinations and was statistically significant at 24 months too (-0.17mm vs. -0.24mm; p=0.04). Subsidence occurred mainly at prosthesis-cement interface, while the cement mantle migrated proximally i.e. opposite to stem. We observed a correlation between male sex, increasing BMI and increased femoral head migration. DXA scans, HHS and VAS scores revealed no significant differences between the groups at any follow-up occasion.
Conclusion: We concluded that stem preheating enhances in-vivo stability of cemented matt-surfaced Ti femoral component.

No effect of adding local infusion analgesia administrated through a catheter in pain treatment after total hip arthroplasty. A randomized double-blind and placebo-controlled clinical trial in 60 patients

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Background: Postoperative analgesia after primary total hip arthroplasty (THA) using opioids is associated with troublesome side effects as nausea and dizziness, as is epidural analgesic with delayed mobilization. Therefore, local infiltration analgesia (LIA) during surgery prolonged with local infusion analgesia (LINFA) into the soft tissue in the hip region through a catheter in the first postoperative days has within a short period gained a major interest in THA fast track settings.
Purpose: LIA at the time of surgery is a validated treatment, the aim of this study was to investigate the additional effect of postoperative LINFA after THA in patients already having LIA during surgery
Methods: A total of 60 consecutive patients undergoing non-cemented THA were randomized into two groups in a double- blind and controlled design. During surgery all patients received standardized pain treatment with LIA. Postoperatively patients were treated with either a solution of Ropivacain, Ketorolac and Adrenaline (LINFA group) or placebo (placebo group) administrated through a catheter to the hip 10 and 22 hours after surgery. Pain score, opioid consumption and length of stay were evaluated.
Findings: After adjustment for multiple testing, there was no statistically significant post operative difference between the LINFA group and the placebo group in relation to pain and tiredness. Some evidence of a short term effect on nausea and vomiting was found. No statistically significant difference was observed in opioid consumption or length of stay between the two groups.
Conclusion: We found some evidence of short term effect of LINFA on nausea and vomiting, but no evidence of an effect on postoperative

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Report from EFORT Travelling Fellowship 2010 in Denmark

Delightful food and gorgeous weather.
Not exactly the two impressions I expected to return with from my Traveling Fellowship experience in Denmark. These were pleasant surprises, considering that I come from a Mediterranean country which prides itself on its sunny summers and diverse cuisine. Denmark beat us to both during this particular week.

What I did expect, though, I found in abundance. There was scintillating conversation with my peers from all over Europe. There was the hospitable environment the Danish Orthopaedic Society created, led by Prof. Dr. Per Kjærsgaard-Andersen and Dr. Camilla Ryge and the rented vans. Then there was all the interesting stuff, the operating theaters and the arthroplasty registry and the breathtaking one, the Rigshospitalet.

The fellowship commenced in Århus, which was the northernmost of the cities we were supposed to visit. The welcome dinner served its purpose well, allowing everyone to get to know each other a little bit and start exchanging stories and comparing notes about surgeries and everything related to the residency. At the beginning of the dinner we must have appeared so glamorous that we even attracted an extra fellow – the fellow from Korea – who introduced himself to us just as that before realizing we weren't the people he was looking for. As Dr. Kjærsgaard-Andersen was going to remark at the end of the week, we were a group by the end of that short three-hour dinner, where there was laughter and the beginnings of friendship.

The experience in Århus was dominated by research, particularly that done by Dr. Søballe and Dr. Bünger. The research labs there were highly sophisticated and complex and spiked a lot of interest, especially

because they had their research fellows present us with some of their projects. The rest of the day set the tone for the rest of the fellowship – hospitality and true curiosity.
The staff at Århus University, especially Ole Brink, was interested not only in sharing their knowledge, but also in obtaining our points of view and thoughts on their presentations. The day progressed with discussion and scientific exchange, and a lot of it took place among the fellows whose curiosity about each other's practices was, and would remain, insatiable.

At the end of the day, Dr. Brink presented us with what was to become the mascot of the fellowship: the Hoptimist, a true Danish souvenir, and a book about Aarhus, which turned out to be the City of Smiles. It certainly lived up to its name.

A word should be put in about our transfers here, because with their practicality and ingenuity, our hosts' ideas deserve special mention. The transfers were done in rented vans, one driven by Dr. Kjærsgaard-Andersen, the other by Camilla Ryge. Although I'm sure part of the credit goes to Denmark's topography and highways, the rides were always pleasant, allowed us brief respites from what was a very busy schedule and set the scene for the growth of friendship among all of us. Per and Camilla were invaluable as tour guides, and they were always tireless at the wheel.

At the end of the day, we were invited to Per's home for dinner, where his family welcomed us. It was perhaps the most pleasant dinner and it began with a tour of their incredible garden. The food was divine, many thanks to his wife who had gone to so much trouble in order to feed thirteen hungry international orthopaedic surgeons, and again, the conversation never once lagged.

The next day was to take place in Vejle Hospital, the best care that you can get in Denmark, according to one of their medical newspapers. It wasn't hard to believe, because cool, calm professionalism seemed to be infused into every room, every person and every action in that place. It had complete absence of rush, reflecting its nature as an elective procedures center, and impressed us especially when we were allowed to roam the halls of the surgical floor with street clothes, peering through win-

dows at operating theaters and having scrub nurses wave – sterilely, of course – at us.

Two procedures were arranged for us, a hip and a knee arthroplasty. Being one of the cornerstones of the orthopaedic profession, it gave rise to a lively discussion, where everybody had questions about the Danish way, including the Danish registry as presented by Prof. Søren Overgaard and wanted to share their own. Technically, as I know personally how much trouble it is to set up a live transmission surgery, I must praise highly every person who was involved in the execution, in Vejle and then later in Odense, where we were privy to watch a trapeziometacarpal arthroplasty live – a first for myself and I believe many of my co-fellows. Our first day in Odense concluded with presentations from all fellows about themselves and their countries. Enthusiasm abounded, and often went beyond the eight minutes that had been intended for this purpose by our hosts (and yes, I am guilty too). It was a great idea and started many a conversation, bringing the group yet closer together.

The second day in Odense took place in the Odense University Hospital, which is a major trauma center and one of the few replantation centers in Denmark. As we found the Danish way to be, our hosts here were just

as pleasant and interested in us as we were in them. Their presentations were obviously well-thought out and a lot of time and effort was spent on us, like everywhere else we had been and everywhere else we would go to, and for which we are eternally grateful.

Odense, with its picturesque quality, was the scene for our social program later that day. It was Camilla's brilliant idea to hire a local guide and have her walk us through the city while telling us the stories that went with it. I'm sure I wasn't the only one who felt like they were following Hans Christian Andersen's footsteps through this city, sometimes falling into his fairy tales, and sometimes returning to the reality of the not-so-pleasant life that he led. Our tour concluded in the restaurant Cro'n for a typical Danish dinner. A typical Danish dinner, by the way, as we found out, consists of very good food, friendly service, amazing conversation and a lot of laughs.

The next day found us traveling over the breathtaking Great Belt Bridge to the Copenhagen area. The good weather stayed with us through the road trip as well, breaking out in rain only briefly outside the city. As traffic increased, so did our anticipation and finally we found ourselves in the large medical complex of Herlev Hospital. Renowned for its shoulder and elbow surgery, walking through its halls one couldn't help but have the feeling that this hospital was large, quite enormous in fact, and functioned like a machine, well-oiled and efficient. Personnel on wheels – scooters and bikes – were what drew our attention the most. What a brilliant idea to navigate long, straight corridors on them.

The sheer size of the hospital was almost intimidating, and the only disadvantage to it was that not all rooms have daylight. Research was yet another big point in that day's program and gave rise to many interesting discussions. I had early on the realization that while so many things that we do across Europe regarding patient care and surgical technique are the same, there are enough points of disagreement to serve for interesting discussion and in my opinion, this is one of the most important aspects of having a fellowship such as this one.

After the training program, we went down to the harbor for a boat ride along Copenhagen's canals and shore. It was yet another breathtaking

activity, seeing the old and the new, and the newest architectural buildings on display in that gorgeous weather. Our trilingual guide was the star of the tour, but only because the Little Mermaid was absent, on her visit to Shangai for an exhibition there. The city remains the perfect picturesque European city in my mind, noble but not cold, proud but welcoming.

On our only free evening that day, a Thursday, we, the fellows, were left on our own devices by our hosts (after making sure everybody had their phone numbers, of course). The late afternoon and early evening had us walking around, exploring downtown and looking for a nice place for drinks after dinner. The fellow from England showed great initiative for this particular bit of exploration, although in the end we didn't stray very far from the hotel. For dinner we chose a lovely little street café, where the food was, as usual, sumptuous and the atmosphere inviting. We finished the evening in a trendy café-bar downtown, and found our way back to our hotel with joint efforts, no pun intended.

The last day, as if to emphasize the adage of 'best for last' had us visiting the Rigshospitalet very close to downtown Copenhagen. It was obvious quickly that this center was a little different from the ones we had visited before. The Rigshospitalet is a highly specialized center, dealing with spinal surgery, pediatric orthopaedics and intensive trauma care. Their staff, busy as they may be normally, took almost a whole day off to accommodate and get to know us. They took us up to their pride and joy – their helipad – right on the seventeenth floor of the hospital, and let us take pictures there, of possibly one of the scenes of the fellowship that will be remembered most clearly. I can't quite say what was the most breathtaking part of the visit to the helipad; the complexity of it, the modernity, or just the sheer height that we were on.

The presentations of the Rigshospitalet staff reflected yet again their specialization and high level of care. We learned about spinal surgery in Denmark, and the work they did with soldiers returning from Afghanistan. The early afternoon session of Dr. Klaus Hindsø deserves special mention here, because it was striking in its setup. Dr. Hindsø taught us the techniques of deformity correction, and he did it in a remarkable way that made sure all of us understood the principles behind

it. I applaud his educational skills and I'm sure all of the fellows agree with me on this point.

Although the Danish system of specialization is not feasible in my country, it raises a good point of discussion. Should an orthopedic surgeon focus on one area, or one type of surgery, or should there be a general approach to orthopedics? It is my personal opinion that residents who do not have the general concept of orthopedic surgery would do worse both as general orthopedists and as specialists. Most of us have used skills acquired in one field on the other during their residency, and the power of creative thinking combined with a wide spectrum of knowledge is what I think makes the excellent surgeon. The excellent surgeon can choose to specialize in one field, but when things get out of hand in surgery, as they are sometimes went to do, he or she will not be stumped.

At the end of the day we had our feedback session. Wherever we went, we were welcomed to such an extent that I'm sure every single one of our group felt very much at home. To see that these surgeons, who have so little time for everything, took time out to spend it with us, share information and converse with us, made me feel proud and humble at the same time. As I have never been on an EFORT Traveling Fellowship before, I cannot quite compare this one with previous ones, but I will go so far as to say that the Danish Orthopaedic Society in general, and especially our hosts in particular – Per, Camilla and Jane – did not just a great job, or a wonderful one. They did the perfect job. Although we did not have enough contact with Danish residents our age, I and others from our group were hard-pressed to find a lot of points to improve when asked at the end of the fellowship. In my humble opinion, this should be the one traveling fellowship that the future ones should be based on.

The last dinner was, as farewells usually are, bittersweet. It gave us a chance to reflect back on the week and reminisce, laugh about the funny moments and say thank you to our tireless hosts. They surprised us – in the one short week that we spent together, they proved that they got to know us quite well. I have no doubt that every one of the fifteen people who brought up our group took away fond memories with them from this week, and that they will be unforgettable.

To conclude, I would like to say, and I believe I speak for everyone, that we are grateful for the chance to get to know each other. We thank EFORT for creating this fellowship, the Danish Orthopaedic Society for, well, paying for it, and our wonderful, wonderful hosts for having us. We thank the staff of all the hospitals we visited for making us feel welcome, taking time off and being curious about us.

It was one hell of a week.

Mrs. Deniz Olgun, MD
Chief Resident
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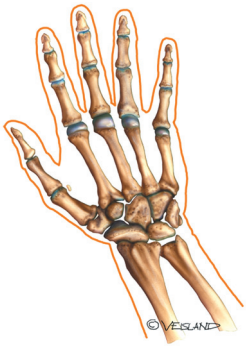
2nd Nordic Wrist Arthroscopy Course

1. - 2. December 2010
Copenhagen



Cadaver workshop in basic arthroscopic skills and advances in treatment

Faculty:
PC Ho, Hong Kong, SAR
Lars Adolfsson, Linköping, Sweden
Anders Björkman, Malmö, Sweden
Peter Jørgsholm, Mølholm,Denmark
Jan-Ragnar Haugstvedt, Oslo, Norway
Niels Thomsen, Malmö, Sweden
Hans Tromborg, Odense, Denmark

Organizers:
Department of Hand Surgery, Malmö University Hospital & Hand Surgery Clinic, Mølholm Private Hospital.

For details regarding program, registration, and accommodation, please observe course calendar at: www.ortopaedi.dk

Contact: helen.wilhelmsson@skane.se