Bedste foredrag
Mikkel Bek Clausen

delt 2. plads
Filip Gertz Lysdal

delt 2. plads
Claus Varnum

Bedste artikel
Kristoffer Barfod

SOCIETAS ORTOPAEDICA DANICA

DOS kongressen
2020

Bedste ph.d.
Steffan Tabori Jensen

Den gyldne YODA 2020: Regionshospital Randers

Det stolte UDDANNELSESTEAM:
Rikke Thorninger (uddannelsesansvarlig overlæge)
Michael Tjørnild (ledende overlæge)
Anders Valen, Martin Bille, Karen Larsen Romme (uddannelseskoordinerende yngre læger) og resten af holdet!

Effectiveness of prescribing a large additional dosage of shoulder muscle strengthening in the non-operative care for subacromial impingement (The SExSI-Trial)

1.

Mikkel Bek Clausen, Per Hölmich, Michael Rathleff, Thomas Bandholm, Karl Christensen, Mette Zebis, Kristian Thorborg

Department of Midwifery, Physiotherapy, Occupational Therapy and Psychomotor Therapy at Faculty of Health, University College Copenhagen; Center for General Practice , Aalborg University; Physical Medicine and Rehabilitation Research-Copenhagen (PMR-C), Department of Physical and Occupational Therapy, Copenhagen University Hospital, Amager-Hvidovre; Section of Biostatistics, Department of Public Health, University of Copenhagen; Sports Orthopedic Research Center – Copenhagen (SORC-C), Department of Orthopedic Surgery, Amager-Hvidovre Hospital, Institute for Clinical Medicine, Copenhagen University

Background: In 2019, the British Medical Journal issued a strong recommendation against subacromial decompression surgery, leaving non-operative care as the only treatment option. Evidence-based guidelines recommend shoulder strengthening as key in non-operative care for subacromial impingement (SIS), but recent studies suggest that the dose of strengthening exercise is not sufficient in current care.
Purpose / Aim of Study: To assess the effectiveness of adding a large additional dose of home-based shoulder-strengthening exercises to current non-operative care.
Materials and Methods: In this double-blinded randomised controlled trial, we randomly allocated 200 consecutive patients with longstanding SIS (>3 months) to intervention (IG) or control (CG). The CG received usual non-operative care according to evidence-based clinical guidelines; the IG received the same plus an add-on intervention with the aim to at least double the total dosage of shoulder strengthening. The Shoulder Pain and Disability Index (SPADI, 0-100), external-rotation and abduction strength, and patient acceptable symptom state (PASS) was evaluated at baseline, 5-weeks, 10-weeks and four-months follow-up (primary end-point).
Findings / Results: Intention-to-treat and per protocol analyses showed no significant or clinically relevant between-group difference for the primary or other outcomes. From baseline to four-month follow-up, SPADI improved in both groups (intention-to-treat: CG 22.8 points, IG 22.1 points, mean between-group difference 0.6 points (95%CI -5.5 to 6.6)). Four months after randomization, only 54% (IG) and 48% (CG) had reached patient acceptable symptom state (p=0.4127).
Conclusions: Prescribing a large additional dosage of shoulder strengthening exercise, in addition to usual non-operative care for SIS, does not result in superior outcome. As the confidence limits for between group differences in shoulder disability did not surpass the margin of clinical relevance, it is unlikely that additional studies will alter this conclusion. Importantly, half of all randomised patients had unacceptable symptoms after four months of non-operative care, leaving a large and substantially disabled group of patients with no further options in the traditional health-care system.

Effectiveness of Spraino for preventing lateral ankle sprain injuries in indoor sports: a pilot randomised controlled trial with 510 athletes with previous ankle injuries

4.

Filip Gertz Lysdal, Thomas Bandholm, Janne Tolstrup, Mikkel Clausen, Stephanie Mann, Pelle Petersen, Thor Grønlykke, Uwe Kersting, Eamonn Delahunt, Kristian Thorborg

Health Science and Technology, Aalborg University;
Physical Medicine and Rehabilitation Research—Copenhagen (PMR-C), Department of Physical and Occupational Therapy, Clinical Research Centre, and Department of Orthopedic Surgery, Amager-Hvidovre Hospital, Copenhagen University; National Institute of Public Health, University of Southern Denmark; School of Physiotherapy, Faculty of Health and Technology, University College Copenhagen; Physical Medicine and Rehabilitation Research—Copenhagen (PMR-C), Department of Physical and Occupational Therapy, Clinical Research Centre, and Department of Orthopedic Surgery, Amager-Hvidovre Hospital, Copenhagen University; Section for Surgical Pathophysiology 7621, Rigshospitalet, Copenhagen University; , Spraino ApS; Institute of Biomechanics and Orthopaedics, German Sport University Cologne; Institute for Sport and Health, University College Dublin; Department of Orthopedic Surgery, Sports Orthopedic Research Center—Copenhagen (SORC-C), Amager-Hvidovre Hospital, Copenhagen University

Background: Lateral ankle sprains (LASs) are common in indoor sports and high shoe-surface friction is considered a risk factor for non-contact LASs. Spraino is a novel Teflon-patch that is attached to the outside of sports shoes to minimise friction at the lateral edge, which could mitigate the risk of LAS.
Purpose / Aim of Study: We aimed to determine preliminary effectiveness (incidence rate and severity) and safety (harms) of Spraino when used to prevent LAS injury among indoor sport athletes.
Materials and Methods: In this exploratory, parallel-group, two-arm pilot RCT, 510 sub-elite indoor sport athletes with a previous LAS injury were randomly allocated (1:1) to Spraino or "do-as-usual". Allocation was concealed and the trial was outcome-assessor-blinded. Match and training exposure, LASs and associated time-loss were captured weekly via text messages. Information on harms, fear-of-injury and ankle pain were also documented.
Findings / Results: 480 participants completed the trial, reporting a total of 151 LASs, of which 96 were categorised as non-contact, and 50 as severe. All outcomes favoured Spraino with incidence rate ratios of 0.87 (95% CI, 0.62-1.23) for all LASs; 0.64 (95% CI, 0.42-0.98) for non-contact LASs; and 0.47 (95% CI, 0.25-0.88) for severe LASs. Time-loss per LAS was also lower in the Spraino group (1.8 vs 2.8 weeks, p=0.014). Six participants reported minor harms because of Spraino.
Conclusions: Compared to usual care, athletes allocated to Spraino had a reduced risk of LAS injury and reduced time-loss, with only few reports of minor harms. The next step is to test these promising risk reductions in a confirmatory RCT.

RISK OF REVISION IN TOTAL HIP ARTHROPLASTY WITH CERAMIC-ON-POLYETHYLENE AND METAL-ON-POLYETHYLENE BEARINGS – RESULTS FROM THE NORDIC ARTHROPLASTY REGISTER ASSOCIATION (NARA)

5.

Claus Varnum, Alma Bedcic Pedersen, Johan Kärrholm, Ola Rolfson, Anne Marie Fenstad, Ove Furnes, Geir Hallan, Antti Eskelinen, Keijo Mäkelä, Søren Overgaard

Department of Orthopaedic Surgery, Vejle Hospital, Department of Regional Health Research, University of Southern Denmark, and the Danish Hip Arthroplasty Register, Denmark; Department of Clinical Epidemiology, Aarhus University Hospital, Denmark; The Swedish Hip Arthroplasty Register and Department of Orthopaedics, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Sweden; The Norwegian Arthroplasty Register, Department of Orthopedic Surgery, Haukeland University Hospital, Bergen and Department of Clinical Medicine, University of Bergen, Bergen, Norway; The Finnish Arthroplasty Registry, Helsinki and Coxa Hospital of Joint Replacement, Tampere, Finland;, The Finnish Arthroplasty Registry, Helsinki and Department of Orthopaedics and Traumatology, Turku University Hospital, Turku, Finland; Orthopaedic Research Unit, Department of Clinical Research, University of Southern Denmark, Odense, Department of Orthopaedic Surgery and Traumatology, Odense University Hospital, and the Danish Hip Arthroplasty Register, Denmark

Background: Ceramic heads were introduced as an alternative to metal heads in total hip arthroplasty (THA) in order to reduce wear and osteolysis which may result in aseptic loosening.
Purpose / Aim of Study: We investigated the risk of any revision of ceramic-on-polyethylene compared to metal-on-polyethylene bearings in primary THA and secondly the risk of revision due to aseptic loosening.
Materials and Methods: The study population was identified from the NARA dataset, and consisted of 310,177 patients who had undergone a primary THA with a ceramic-on- polyethylene or metal-on-polyethylene articulation because of primary osteoarthritis, femoral head osteonecrosis, arthritis, or sequelae from childhood hip disorders. The adjusted relative risk (aRR) and 95% confidence intervals for revision were assessed with regression with the pseudo-value approach and adjusted for sex, age, diagnosis, year of surgery, fixation, and femoral head size. Analyses were made separately for ceramic-on-conventional polyethylene (CoP) compared to metal- on-conventional polyethylene (MoP), and ceramic-on-crosslinked polyethylene (CoXLP) compared to metal-on- crosslinked polyethylene (MoXLP).
Findings / Results: CoP vs. MoP: 24,018 had CoP and 166,402 MoP bearings and were followed up to 20 years. At 20 years, the aRR for any revision was 1.04 (1.01-1.07) for CoP compared to MoP. There was no difference in aRR for revision due to aseptic loosening. CoXLP vs. MoXLP: 25,070 had CoXLP and 94,687 MoXLP bearings and were followed up to 12 years. At 12 years, the aRR for any revision was 0.99 (0.97-1.02) for CoXLP compared to MoXLP. There was no difference in aRR of revision due to aseptic loosening.
Conclusions: The risk of revision was increased by 4% in CoP compared to MoP THAs at 20 years but no difference was found for CoXLP compared to MoXLP at 12 years. Our study did not demonstrate any advantage of ceramic heads over metal heads in the medium- to long-term follow-up. A limitation is that the NARA database does not contain any information on type of ceramic material.

DOS PhD-pris 2020

"Evaluation of dual-mobility total hip arthroplasty in elderly patients with femoral neck fracture or hip osteoarthritis."

Steffan Tabori Jensen, er afdelingslæge ved traumesektoren, Ortopædkirurgisk Afdeling, Aarhus Universitetshospital.

Afhandlingen udgår fra Aarhus Universitet. Studierne udgår fra Ortopædkirurgisk Afdeling, Hospitalsenheden Vest.

Vejledere for afhandlingen har været professor, PhD Torben Bæk Hansen, professor, PhD Maiken Stilling.

Dobbelt-mobilitet hofteproteser har et smart design, som muliggør en større bevægelse i hofteleddet og mindsker risikoen for at den kunstige hofte kan gå af ud led. Dette er især en fordel for patienter med nedsat compliance for mundtlige restriktioner vedrørende bevægeligheden i den kunstige hofte. Formålet med dette ph.d.-projekt har været at evaluere resultaterne efter protesekirurgi med dobbelt-mobilitet hofteprotese som den primære behandling hos ældre patienter med brud på lårbenshalsen eller slidgigt i hoften.

Ph.d.-afhandlingen bidrager bl.a. med ny viden om funktionelle resultater, komplikationer, protesemigration og slid af plastikkomponenten i dobbelt-mobilitet hofteproteser. F.eks. viste resultaterne, at plastikkomponent blev mere slidt i dobbelt-mobilitet hofteskåle indsat uden knoglecement sammenlignet med cementerede hofteskåle. Behandling med dobbelt-mobilitet hofteprotesen var generelt forbundet med høj patienttilfredshed, gode funktionelle resultater og lav risiko for ledskred og reoperation. Et stereorøntgen-studie viste mere udtalt og kontinuerlig mikrobevægelse ved de ucementerede hofteskåle sammenlignet med cementerede hofteskåle to år efter operationen og dårligere forankring af ucementerede hofteskåle hos patienter med lav knoglekvalitet før operationen.

Resultaterne af ph.d.-projektet støtter den fremadrettede kliniske brug af dobbelt-mobilitet hofteprotesedesignet med cementeret indsættelse hos ældre patienter med brud på lårbenshalsen eller slidgigt i hoften.

Afhandlingen er forsvaret ved Aarhus Universitet den 1. marts 2019 og baseret på 4 artikler:

1. Higher UHMWPE wear-rate in cementless compared with cemented cups with the Saturne® Dual-Mobility acetabular system.
   Steffan Tabori-Jensen, Christina Frølich, Torben B. Hansen, Søren Bøvling, Morten Homilius, Maiken Stilling.
   Hip Int. 2018 Mar;28(2):125-132.

1. Good function and high patient satisfaction 3 years after dual mobility THA following femoral neck fracture. A cross-sectional study of 124 patients.
   Steffan Tabori-Jensen, Torben B. Hansen, Søren Bøvling, Peter Aalund, Morten Homilius, Maiken Stilling.
   Clin Interv Aging. 2018 Apr 9;13:615-621.

1. Low Dislocation Rate of Saturne®/Avantage® Dual-Mobility THA after Medial Femoral Neck Fracture. A cohort study of 991 hips with a minimum 1.6-year follow-up.
   Steffan Tabori-Jensen, Torben B. Hansen, Maiken Stilling.
   Arch Orthop Trauma Surg. 2019 May;139(5):605-612. doi: 10.1007/s00402-018-3093-8. Epub 2018 Dec 13.

1. Inferior stabilization of cementless compared with cemented dual-mobility cups in elderly osteoarthrosis patients: a randomized controlled radiostereometry study on 60 patients with 2 years' follow-up
   Steffan Tabori-Jensen, Sebastian Breddam Mosegaard, Torben B. Hansen, Maiken Stilling
   Acta Orthop. 2020 Feb 6:1-8. doi: 10.1080/17453674.2020.1720978.

DOS bedste artikel

'Efficacy of early controlled motion of the ankle compared with immobilisation in non-operative treatment of patients with an acute Achilles tendon rupture: an assessor-blinded, randomised controlled trial'

Kristoffer Weisskirchner Barfod, Maria Swennergren Hansen, Per Hölmich, Morten Tange Kristensen, Anders Troelsen. Br J Sports Med 2019; bjsports-2019-100709.

Artiklen undersøger behandlingen af akut akillessenerupturog udfordrer det gældende paradigme, at tidlig kontrolleret bevægelse er afgørende for seneheling. Det betragtes af mange som et faktum at tidlig kontrolleret bevægelse er afgørende for korrekt heling af en overrevet akillessene, men før indeværende studie er det aldrig blevet undersøgt i et kontrolleret randomiseret setup. Vi fandt mod forventning ingen effekt af tidlig kontrolleret mobilisering på sene længde, sene heling eller patientrapporterede outcomes.

Studiet er metodemæssigt stærkt med et randomiseret setup, som nøje har fulgt CONSORT guidelines. Studieprotokollen blev publiceret i Trials Journal.

Artiklen har ført til ændring af akillessenebehandlingen både indenfor og udenfor Danmarks grænser. Fokus er flyttet væk fra tidlig og aggressiv kontrolleret mobilisering til en accept af, at seneheling tager tid.

Artiklen er publiceret i British Journal of Sports Medicine, der med en impact factor på 11,6 i 2018 er det højest rangerende idrætsmedicinske/idrætskirurgiske tidsskrift.