IS REPORTING TO THE DANISH SHOULDER ARTHROPLASTY REGISTRY RELIABLE?

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BACKGROUND AND PURPOSE:
To ensure the usefulness of national joint replacement registries, it is important to evaluate the quality and accuracy of data. In this study we compare data reported to the Danish Shoulder Arthroplasty Registry (DSR) with data from medical records and we evaluate the agreement of terminology and procedural definition.

PATIENTS AND METHODS:
We identified 855 procedures reported to the DSR in 2009 and 833 related medical record (operation files and radiographs). The population was divided into two groups: primary procedures and revisions. For primary operations we examined agreement on diagnosis, implant brand and design, additional and previous surgery. For revision procedures we also focused on primary diagnosis and reason for revision.

RESULTS:
The lowest degree of agreement was found for the variable ‘type of prosthesis’ and ‘additional procedures’ with a degree of data conflict of 27.2% and 15.2% respectively. Furthermore we observed disagreement in procedural definition and use of terms of biceps tenotomy / tenodesis and cuff reconstruction with 11.6% and 8.5% respectively.

CONCLUSION:
We identified some variables that were incorrectly reported especially ‘type of prosthesis’. We also observed disagreement in use of the terms tenotomy, tenodesis and cuff reconstruction when reported as additional surgery. Until now incorrect reporting has been changed manually when data are used in the annual reports and for scientific purposes. However, as a consequence the reporting procedure is changed this year. We believe that clarity of definitions and dialogue between surgeons is crucial to ensure accurate reporting to a joint replacement registry.