Distal radioulnar joint replacement in patients with Madelungs deformity

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Conclusions:
Aptis DRUJ joint replacement improve Madelung patients upper extremity function (DASH) one year after surgery in a cohort of patients with moderate to severe affection of the DRUJ.

Objective:
In Madelungs deformity the Distal Radioulnar joint (DRUJ) is often involved in the pain pathogenesis especially in moderately to severely affected patients. The DRUJ is of great importance to the function of the upper extremity (Shaaban 2004). We studied the functional outcome one year after Constrained Distal Radioulnar Joint Replacement (ulnar tilt 37 degrees (from 32 to 60) and lunate subsidence 2mm (-2 to 5)).

Methods:
We included patients (n=9) who had a DRUJ replacement a. m. Aptis. Disability of the Arm Shoulder and Hand, grip strength, and EQ-5D prior to surgery and at 1 year follow up were compared. A paired t-test without correction for repeated measurements was used.

Results:
Age of patients: 44(18) (Years (SD)). Patients had a high preoperative DASH score of 50(24) compared to normal 10(14). DASH score dropped significantly to 24(8) corresponding to an improvement of 26(12) (p<<0.01). Grip strength of the affected hand improved from 13 (11) kg to 26 (10)kg (p<<0.01). EQ-5D was not significantly improved.
One patient (included in the results) had a revision after 2 months and a replacement athroplasty within the first year.