OUTCOMES FOLLOWING ARTHROPLASTY OF THE DISTAL RADIOTULNAR JOINT IN RHEUMATOID PATIENTS

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Introduction
- Load-bearing joint in the forearm
- Instability reduces the lifting capacity
- Rheumatoid arthritis has a common pattern of injury
  - Caput ulnae Syndrome
  - Vaughan Jackson Syndrome
- Different surgical options for salvage Darrach, Sauvé-Kapandji, Unipolar prostheses
- Consequences: impingement, instability, and Ulnar translocation of the carpus

Purpose
Evaluate a different treatment for RA patients with compromised DRUJ, using a self-stabilizing total distal radio ulnar joint replacement prosthesis. (APTIS Medical, Louisville, KY)

Methods
- Case series
- All DRUJ arthroplasty secondary to RA patients between 2005 and 2011
- 12 Females and 5 Males, 19 prostheses total
- Mean age 57 years (range 38-85)
- Average follow-up period was 39 months (12-79 mo)
- Evaluations
  - Pre and post ROM, VAS
  - Post operative DASH and PRWE
  - Clinical survey of overall satisfaction
  - Pre and Postoperative radiological evaluation (mean 22 mo)

Summary points
- High degree of patient satisfaction
- Decrease in pain level
- Wrist function as measured by pronation and supination is increased
- Self stable prosthesis, no ulnar translocation of the carpus was found
- DRUJ replacement could improve the overall performance of the patient daily activities

Results

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Range of Motion

Ulnar Translocation of the Carpus Index

Chamay 0.87 +/- 0.04 p=0.759
Diliberto 0.15 +/- 0.24 p=0.682
Bouman 0.87 +/- 0.04 p=0.181

Graphical representation of data.