

Outcome Assessment after Aptis Distal Radioulnar Joint (DRUJ) Implant Arthroplasty

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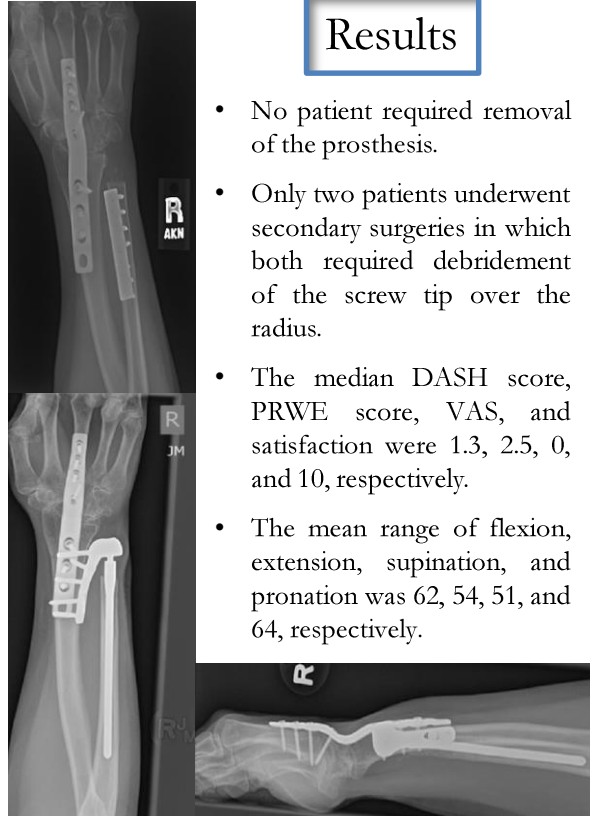


Objective

- We assessed the outcome results of patients after DRUJ implant arthroplasty using the Aptis (Scheker) prosthesis.

Methods

- 13 patients with 14 prosthesis
- During the past 10 years
- Arthroplasty due to persistent symptoms of instability, chronic pain, and stiffness.
- mean follow-up visit of 12 months (range: 2-25 months).
- Patients contacted prospectively by phone in order to administer the disabilities of the arm shoulder and hand (DASH), patient rated wrist evaluation (PRWE), and visual analogue scale (VAS), and to interview regarding satisfaction and progress in daily activities.
- Eleven patients out of 13 could be reached with a median follow-up time of 60 months (range: 2 to 102 months).



Results

- No patient required removal of the prosthesis.
- Only two patients underwent secondary surgeries in which both required debridement of the screw tip over the radius.
- The median DASH score, PRWE score, VAS, and satisfaction were 1.3, 2.5, 0, and 10, respectively.
- The mean range of flexion, extension, supination, and pronation was 62, 54, 51, and 64, respectively.

Conclusion

- The Aptis prosthesis has shown satisfactory results with 100% survival rate in all reports.
- The constrained design of this prosthesis gives enough stability to prevent painful subluxation.

Table 1. Patients' follow-up after distal radio-ulnar joint implant arthroplasty

	Median	Range (Min-Max)
Follow up, month	60	2-102
VAS 0-10	0	0-6
Satisfaction 0-10	10	7-10
DASH score 0-100	1.3	0-72
PRWE score 0-100	2.5	0-61
Pain score 0-50	2.0	0-30
Function score 0-50	0.0	0-31
Lifting capacity, 0-20 lbs.		
Involved	20	5-20
Uninvolved	20	10-20

DASH=Disabilities of the arm shoulder and hand, PRWE=Patient rated wrist evaluation, VAS=Visual analogue scale

Table 2. In clinic follow-up examination results after distal radio-ulnar joint implant arthroplasty

	Mean (SD)	Range (Min-Max)
Follow-up time to examination, month	12 (10)	2-25
Flexion	62 (16)	50-90
Extension	54 (8.9)	40-60
Supination	51 (30)	5-80
Pronation	64 (26)	20-90
Radial deviation	13 (6.5)	5-20
Ulnar deviation	28 (13)	10-40
Grip strength		
Involved	47 (15)	32-70
Non-involved	68 (23)	40-90