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SAUVE-KAPANDJI TECHNIQUE IN THE MANAGEMENT OF A RHEUMATOID WRIST IN A CASE

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ABSTRACT

Wrist involvement in Rheumatoid Arthritis (RA) is frequent, variable in its presentation, heterogeneous in its evolution and has an important impact on the function of the affected hand. Surgery must be indicated within the framework of a structured medical and surgical approach that considers the whole patient. Surgical treatment at the wrist level is indicated in cases of resistant chronic pain, persistent articular synovitis, or chronic tenosynovitis and also in cases of painful limitation of supination, risk of complications due to wrist deformity and tendinous or neurological complications. The surgical goal in RA is to restore correct function but not necessarily normal anatomy, with the goal of achieving a painless, stable wrist, correctly positioned. We present the clinical observation of a 72-year-old patient operated by tendon and intra-carpal synovectomy, accompanied by an arthrodesis of the lower ulnar articulation following a metaphyseal resection of the lower extremity of the ulnar according to Sauve and Kapandji.

KEYWORDS: Rheumatoid wrist -Sauvé-Kapandji operation.

INTRODUCTION

Involvement of the wrist in rheumatoid disease is very common. These lesions in the wrist should be considered in the general context of rheumatoid disease. Left untreated, joint and tendon destruction can cause deformity and loss of function, sometimes a source of major disability. The objectives of conservative surgery are: synovectomy, stabilization and realignment. The advantage of this surgical technique consisting in keeping the head of the ulna arthrodesated, allows to keep its internal ligament attachments, and to restore an anatomical articular surface with the wrist.

OBSERVATION

This is a 72-year-old patient, followed for RA under treatment, her symptoms go back 8 months with the appearance of a swelling on the dorsal face of the right wrist gradually changing in size and becoming painful at the palpation and mobilization of the right wrist with a deficit of the extensors and functional discomfort. (Fig. 1)

On clinical examination

• Tumefaction occupying the entire dorsal surface extending opposite the first metacarpal of the right wrist, soft polylobed, mobile in relation to the 2 planes, slightly painful on palpation (Fig. 2a)

• The wrist is deformed like a camel's back. (Fig. 2a)

• Protrusion of the ulnar head exaggerated at the supination of the carpal (deviated in supination) and the metacarpal

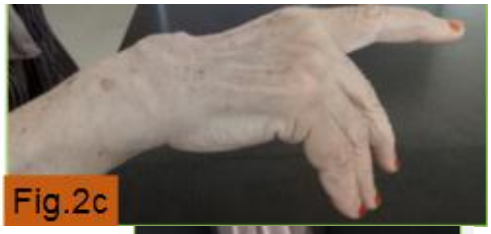
• Buttonhole deformation of the thumb (PCM flexion, IP hyperextension, passively reducible) (Fig. 2b)

• Metacarpophalangeal extension deficit (3, 4, 5th finger). (Fig. 2c)

• Mobility of the right wrist: flexion at 40 °, extension at 20, pronosupination is preserved, thumb retropulsion at 30 °

• Decreased clamping force compared to the contralateral side.

Radiography showed (Fig. 3a): Central involvement with anterior subluxation of the radiocarpal and dorsal subluxation of the cubital head and enlargement of the radioulnar space and the presence of multiple bone erosions. (Fig.3b)



SURGICAL TECHNIQUE

Dorsal approach of the wrist (a), ten synovectomy (b, c) of the 6 extensor compartments with total rupture of the common extensor of the fingers (tendon by tendon),then revival of the RUD joint, with trephination by pin (d).

Double osteotomy 2 cm and 4 cm from the ulnar head and interposition of the bone fragment taken from the RUD then stabilization with a 3.5 screw and 2 18/10 pins.

Creation of a tunnel at the distal end of the ulna, then passage of the hemi-tendon of the EUC (f).

Suture of the common extensor of the fingers on the proper extensor of the index finger after tension adjustment and reinforcement by a sampling of the palmar longus, finally denervation of the posterior interosseous nerve was performed.


a
b
c
d
e
f
g
h
i

RESULTS

The functional results were good (follow-up at 3 months): pain, daily activities, mobility, as well as the patient's subjective assessment. (a, b, c, d)

Postoperative radiographic follow-up (9 months follow-up): To assess the progression of the disease based on: Larsen classification, carpal height, cubital glide, radial inclination and scaph-lunar distance. (e)

DISCUSSION

The stabilization of such a threat must be surgical, by fixing the ulnar head to the radius in the reduction position (Sauve-Kapandji intervention) associated in both cases with the creation of an ulnar stump located at the height of the metaphysis, at which level will be the pronosupination.

These two operations, tenosynovectomy of the extensors and reduction-stabilization of the RUD, are most frequently grouped in the same intervention called "of the dorsal rheumatoid wrist"[1, 2]

The preservation of the ulna head seems an important moment to consider, since it allows keeping the ligamentary group and the ulnar carpal, which seems less to aggravate the evolution towards ulnar sliding than resection of the ulna.[3]

As a rule, this conservative surgery results in a stable and painless wrist and prevents recurrence, but at the cost of varying stiffness depending on the extent of the lesions.[4]

CONCLUSION

Management of the rheumatoid wrist must be early and multidisciplinary. It requires regular reassessment in order to optimize treatment and avoid disability, which is a source of handicap.

CONSENT

The patients have given their informed consent for the case to be published.

Competing Interests

The authors declare no competing interest.

Authors 'Contributions

All authors have read and agreed to the final version of this manuscript and have equally contributed to its content and to the management of the manuscript.

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