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THE BILATERAL SAUVE KAPANDJI INTERVENTION IN A YOUNG PATIENT WITH TRAUMATIC AFTER-EFFECTS OF BOTH WRISTS

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ABSTRACT

It is one of the surgical techniques used to correct carpal instability, osteoarthritis of the lower radio ulnar joint or pronosupination stiffness. This causes pain when moving the wrist, often with painful cracking, causing significant functional discomfort. The operation consists of blocking the joint between the ulna and the radius associated with an osteotomy of the ulna in order to regain some mobility.

KEYWORDS: Sauvé Kapandji- Wrist.

A) INTRODUCTION

Arthrodesis of the distal radioulnar joint combined with the creation of a nonunion of the distal ulna is often referred to as the Sauvé-Kapandji procedure.

Alongside rheumatological indications, during rheumatoid arthritis for example, the Kapandji rescue operation remains of great interest in post-traumatic indications such as chronic instability of the lower radioulnar after sprain or dislocation, or in stiffness. or ankylosis of pronosupination due to malunion of the radius.

We illustrate the case of a patient with traumatic aftereffects of both wrists who benefited from this intervention.

B) MATERIEL AND METHODES

Patient 26 y.o, right-handed, victim of a domestic accident with reception on both wrists

- Right wrist: A comminuted articular fracture of the lower end of the right radius with fracture of the ulnar styloid treated by screw plate reduction. The fracture consolidated but ulnocarpal impingement with pseudarthrosis was noted on the functional level; à hindering limitation of supination, a scintigraphy of the wrist demonstrated marked bone pain in relation to the non-consolidated multifragmentary tear-off fracture of the right ulnar styloid.
- Left wrist: Painful stiffness of the wrist, especially in supination, related to a lower radio-ulnar dislocation resulting from trauma.



Right wrist: Consolidated radius fracture, right ulno-carpal impingement



Scintigraphy of the right wrist showing ulnocarpal bone pain

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C) Operative Technique

Both wrists had the intervention of Sauvé Kapandji. On the technical level, the operation is carried out via a median dorsal approach, the posterior ulnar is identified and released, the joint is exposed by longitudinal incision at the ulnar edge of the slide of the extensor proper of the little finger, the resection is made with an oscillating saw, the ulnar and radial joint surfaces are sharpened and the ulnar head fixed in intermediate position by 02 3.5mm screws. An intraoperative radiographic control is carried out to control the position of the ulnar head and the length of the screw. The joint capsule is sutured and the pronator quadratus is interposed.



Intraoperative image during ulna resection using the oscillating saw

D) RESULT

Mobility is complete in pronosupination for both wrists, in terms of pain: the right wrist has no pain and the left has minimal pain at 12 months follow-up.

Radiologically, the arthrodesis is fused and no ossification of the resection area for the 2 patients.





X-ray of the wrist face and profile after 12 months

E) DISCUSSION

Sauvé-Kapandji technique could avoid complications common in other procedures, such as ulnar-carpal migration. [1,3,4]

Our study agrees with what in the literature with good results regarding the range of motion of the joint, with an acceptable improvement in pain, it remains reserved for adult subjects whose unique complaint is the painful dislocation of the lower radio-ulnar bone. [2] In posttraumatic cases, this intervention must always be reserved in balance with interventions aimed at restoring normal anatomy of the skeleton of the 02 bones of the forearm and especially of the lower end of the radius.

F) CONCLUSION

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The Sauvé-Kapandji intervention at the cost of a precise surgical technique allowed us to obtain clinical results on pain, mobility and grip strength, of good quality and above all lasting.

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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