

The Place of Surgery in the Treatment of the Tenosynovite of Dequervain: About 10 Cases

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DOI: [10.36347/sjams.2019.v07i10.046](https://doi.org/10.36347/sjams.2019.v07i10.046)

| Received: 18.10.2019 | Accepted: 26.10.2019 | Published: 30.10.2019

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Abstract

Original Research Article

The tenosynovite of Dequervain remains among the principal causes of the pains of the radial edge of the wrist. To relieve the patient of this pain source of discomfort and functional impotence was since the era of Dequervain the concern of the experts. If the majority of them plead until our days for medical assumption of responsibility, others nevertheless direct their attitude towards an early surgery like radical treatment without repetition. Elsewhere, much from authors concluded with the relation between the failure from the medical treatment and the existence from anatomical variations, particularly the existence of a septum intratunellaire insulating tendon EPB in a tight compartment. It is to define the place of the surgery in therapeutic, that we propose an analytical study of ten cases of TSDQ treated surgically in the service between 2015 and 2017. Among our patients, we carried out successfully the technique of fixing of the scrap capsulaire to the derm after the realization of a synovectomy and/or the résection of a septum or a musculo-tendineuse anomaly. In the light of our results and those of the literature, it appears clear that the surgery offers an effective solution in the therapeutic management of the TSDQ and deserves to be regarded as the treatment of 1st intention in the cases seen tardily.

Keywords: De Quervain - Tenosynovitis - Radial edge of the wrist - Surgery.

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INTRODUCTION

The tenosynovite of Dequervain (TSDQ) is a chronic stenosis of the 1st digital posterior compartment (DPC) in relation to a mismatch between the volume of extensor short tendons (EPB) and long thumb abductor (APL) with their osteofibrous pulley. The clinical description was created in Dequervain in 1895. His diagnosis is essentially clinical, echography is the only necessary complementary examination. His treatment is often first line medical, surgery that was reserved for rebel or repeat cases can be offered from the beginning.

MATERIALS AND METHODS

Over a fouryear period, between January 2014 and December 2017, 12 patients were treated for TSDQ, of which only 10 were selected for the study for the following reasons: All patients were monitored in the Traumatology Orthopedie II department of the Mohammed V Military Hospital since their first consultation for painful symptomatology. They all received surgical treatment by the same team and according to the same operational technique derived

from Leviet's technique based on the fixing of the capsular lamb to the dermis, after failure of a standardized medical care. Their post-operative care was unequivocal.

RESULTS

The average decline was 2 years (from 6 months to 3.5 years). Our patients were divided into 6 women and 4 men, with an average age of 38 years with extremes of 26 and 60 years. No histories of traumatic or other events has been recorded in our patients. All patients were right-handed. The left side was reached in 6 patients, so the dominant side was affected 4 times out of 10. In all patients, daily manual work involving the thumb and wrist in repetitive motion was the main etiology. All patients had a Finkelstein + test, a Brunelli + test with pain triggered at the pressure of radial styloid. The standard X-ray was normal in all cases. The echography has objectified synovial hypertrophy and peritendinous blooming in 8 patients. Nine of our patients received initial medical treatment based on painkillers and NSAIDs without success, giving way to cortisone infiltration. The results of the latter were

disappointing in 8 patients, +/- satisfactory in 1 patient. The 10th patient was operated on from the ground because he had a tumefaction downstream of radial styloid that caused a restriction of thumb mobility. Synovectomy was performed in 8 patients and anatomical abnormalities (a sagittal septum, duplicated APL tendon) were recovered in the other 2 patients. The post-operative outcome was satisfactory and evolution was very good without recurrence in all 10 patients.



Fig-1: Tumefaction of the radial styloid of the right wrist



Fig-2: Echography showing hypertrophic synovite around the PLA surrounded by a blooming



Fig-3: The hypertrophic synovite around the PLA.



Fig-4: Resection of hypertrophic synovite

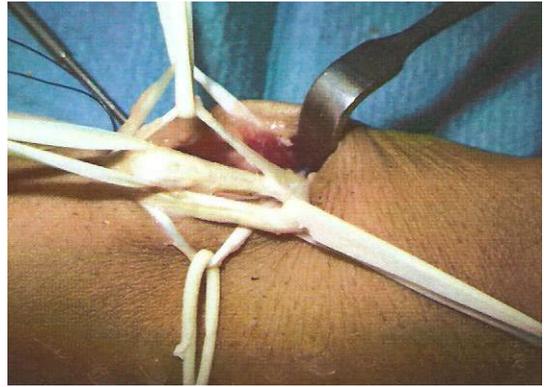


Fig-5: The main PLA (3 chiefs) and the supernumerary PLA



Fig-6: Hypertrophic synovite resected.



Fig-7: The supernumerary APL tendon after resection (interposed between two carpal bodies)



Fig-8: Post-operative result (no palm-to-abduction luxation)

DISCUSSION

In the light of the results of the literature and the analysis of our results, our discussion will focus on the place of surgical treatment as an effective strategy in the therapeutic management of the tenosynovite of De Quervain compared to medical treatment. Described by De Quervain in 1895, the tenosynovite of De Quervain defined as a single or bi-compartmental intratunellar tendinous conflict of the 1st CDP, is one of the main causes of the pains of the radial edge of the wrist [1-3]. Lifting the patient from this pain causing discomfort and/or functional impotence has been the concern of practitioners since the Dequervain era. While the majority of them advocate for medical care up to the present day, others nevertheless point their attitude towards early surgery as radical treatment without recidivism. If medical care helps to relieve 80% of the she is sick, but she is not without complications. Infiltrators can causing, especially if repeated, pigmentation and neuritis disorders Sensitive branches of the radial nerve. In the series Harvey, Harvey and Horsley [4], among the 63 infiltrated wrists, two had developed a digestion near the injection site Corticoid and 3 had transient hyperesthesia in the radial nerve territory. In our practice we have seen a case of a blot-type debugging achromic following cortisone infiltration. Tendinous rupture by secondary necrosis of the intratendinous injection of corticoid remains the haunting of this conservative treatment [5]. Thus, it seems clear to us that all these studies converge on the idea that the success of medical treatment by cortisone infiltration remains dependent on a number of parameters including the technique adopted in injection, the accuracy of the gesture and the presence or absence of anatomical variations, including an intratunellar septum. Moreover, this so-called conservative treatment is far from uncomplicated. Surgery was typically reserved for refractory cases [6]. At the moment, when analyzing literature studies and our results, it seems clear to us that surgery has a significant place in the therapeutic management of the tenosynovite de De Quervain for two main reasons:

The complications encountered during cortisone infiltration. These incidents had led many authors to question the effectiveness of medical treatment and to direct their attitude towards surgery [5]. The complete suppression of the symptomatology of the tenosynovite of De Quervain and a non-recurrence evolution can only be achieved by removing the anatomical factors involved, which are both hypertrophic synovite as stenosis, and anatomical variations predisposing to this lesion [7]. VIET [8] had reported between 1983 and 1990 a series of 59 cases of Tenosynovite of Dequervain, of which 49 (or 83.59%) were performed after failure of medical treatment. Of those cases 33 (55.9%) had at least one infiltration. In our series, the operative action was indicated first in one

patient who had a tumefaction downstream of radial styloid that caused a restriction of thumb mobility and second in the other nine after failure of cortisone infiltration. All incisions were longitudinal, of which 6 were 2 cm miniincisions. No healing problems were reported. On the other hand, the view obtained was excellent and always allowed us a wide exploration and an easy gesture. In our patients, we have successfully performed the technique of fixing the capsular lamb to the dermis to avoid anterior uptake of the tendons of the extensor compartment. After the completion of a synovectomy and/or the resection of a septum or a musculotendinous anomaly.

The post-operative outcome was satisfactory and evolution was very good without recurrence in all 10 patients.

CONCLUSION

In light of our findings and those of the literature, it is clear that the clinic offers an effective solution in the therapeutic management of the tenosynovite of Dequervain and deserves to be treated as first-line treatment in cases seen late.

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