

SURGICAL TREATMENT OF TRIGGER FINGERS

F. VAES, L. DE SMET, H. VAN RANSBEECK, G. FABRY

The surgical treatment of 55 trigger fingers resulted in 87% patient satisfaction, without major complications. The mean incapacity was 1.4 weeks. Three recurrences were noted ; four patients had a slight extension lag and three still experienced some local pain.

Keywords : trigger finger ; surgery ; hand.
Mots-clés : doigts à ressaut ; chirurgie ; main.

INTRODUCTION

Trigger finger, snapping finger, or digital tenosynovitis stenosis is a common problem in daily hand practice (4). The standard textbooks recommend surgical treatment, i.e. section of the A1 pulley. In the past decade, several reports have been published about the nonoperative treatment, injection of steroids, splinting and percutaneous transection of the pulley, with apparently satisfactory results. This treatment protocol has now been the first choice in most departments for recent trigger fingers (1-3, 5-17). In refractory cases, recurrences, triggering of more than 3 months' duration and locked fingers, surgical treatment is still recommended.

Despite the widespread use of surgical treatment, only a few reports are available regarding the results (18,19). The aim of this survey is to report the results and complications of surgical treatment for trigger fingers. All operations were done by the classical open transection of the A₁ pulley.

MATERIAL AND METHODS

In a retrospective study 47 patients with 55 surgically treated trigger fingers were included. So-called congen-

ital cases were excluded. There were 30 women and 17 men, with a mean age of 57.1 years (range : 32 to 78 years).

Prior to surgical treatment 11 fingers had been treated conservatively. The surgical procedure was performed under local anesthesia as an outpatient procedure. For the long fingers a longitudinal incision extending from the distal palmar crease down to the metacarpophalangeal crease was made. Blunt dissection exposed the A1 pulley, which was sectioned with a number 15 blade. Patients were encouraged to mobilize the finger immediately postoperatively. For the thumb a transverse incision at the MCP flexion crease was used. The digital nerves were protected during the dissection. All patients were contacted after a minimum follow-up of 6 months. They completed a standard questionnaire dealing with preoperative complaints, patient satisfaction, subjective results, duration of treatment, work relief and complications. The right side was involved in 25 cases, the left in 15 and in 7 cases there was bilateral involvement. The thumb was the most frequently involved digit, followed by the medius, the fourth and the little finger (table I). Symptoms had been present on average for more than 6 months.

Table I. — Involved fingers

Involvement of digit in % of the cases	
Thumb	25 (46%)
Index	5 (9 %)
Medius	14 (25%)
Fourth	7 (13%)
Fifth	4 (7%)

Orthopaedic Department, University Hospital Pellenberg, Weligerveld 1, B-3212 Pellenberg, Belgium.
Correspondence and reprints : L. De Smet.

Table II. — Associated pathology

Diabetes	5
Dermatitis	1
Carpal tunnel	6

Associated pathology was seen in 10 patients (table II); 11 were smokers. Fifteen were white collar workers, 5 blue collar workers. The others were retired or unemployed.

RESULTS

Preoperative symptoms and signs

The clinical problem had been present for less than 4 weeks in 2 patients, between one and 2 months in 4, between 2 and 3 months in 10, between 3 and 6 months in 11 and longer than 6 months in 20. Analgesics or NSAID's were needed one or more per day in 6 patients; the 41 others did not require medication.

The problem was considered serious by 23 patients, moderate by 11 and minor by 13. Triggering occurred at least once a day in 45 patients. Locking in flexion occurred in 20 patients for less than 10 minutes, between 10 minutes and one hour in 1 patient, and for 3 patients it remained until the finger was manually reduced. Pain was severe in 17 patients, moderate in 15 and absent or only slightly present in 15 patients.

Outcome

Patient satisfaction was at least 80% for 41 patients (87%), 4 were moderately satisfied, and 2 were dissatisfied. The disability caused by the operation was only slight or moderate for 37 patients (even absent in 17). The other 10 claimed a severe disability.

Symptoms disappeared after the operation in all but 3 patients who were free of symptoms between 3 months and 6 months. The postoperative work incapacity was less than one week for 20, between 1 and 2 weeks for 8, between 2 and 4 weeks for 11, and between 4 and 8 weeks for 8 patients. No one was on sick leave more than 2 months. The mean duration was 1.4 weeks.

Four patients had a slight extension deficit ($< 10^\circ$ in the PIP-joint), triggering recurred in 3 patients (3.3 and 12 months postoperatively); 3 experienced some residual scar pain.

In the future 14 would prefer an operation immediately rather than an infiltration; 7 would prefer a trial infiltration (26 could not compare).

DISCUSSION

With beneficial results in up to 96% of cases following conservative treatment for trigger fingers, steroid injection into the tendon sheath remains a reasonable option for most patients (1-3, 5-17). The recurrences necessitate repeated injection, and success rates of only 50 to 75% mean that surgical treatment often remains necessary.

The 11.3% failure rate and high number of complications (75% neurologic sequelae and 4% infection) reported by Thorpe (18) were not confirmed by Turowski *et al.* (19) (success rate 97%) nor by the present survey (success rate : 87%).

The use of local anesthesia in an outpatient setting, the minimal morbidity and good outcome still make surgical treatment a valuable option. We would endorse the conclusion of Benson and Ptaszek (2) that surgery may be the best choice in patients with trigger fingers who continue to be symptomatic after one simple infiltration.

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SAMENVATTING

F. VAES, L. DE SMET, H. VAN RANSBEECK, G. FABRY. Chirurgische behandeling van springvingers.

De chirurgische behandeling van 55 springvingers gaf een 87% gunstig resultaat, zonder majeure complicaties. De gemiddelde arbeidsongeschiktheid was 1.4 weken. Wij zagen 3 maal een recidief, bij 4 was er licht extensiedeficiet en bij 3 patiënten bleef er lokale pijn.

RÉSUMÉ

F. VAES, L. DE SMET, H. VAN RANSBEECK, G. FABRY. Traitement chirurgical des doigts à ressaut.

Le traitement chirurgical de 55 doigts à ressaut a abouti à un résultat satisfaisant dans 87% des cas, sans complications majeures. L'incapacité de travail a été en moyenne de 1,4 semaines. Une récurrence a été observée 3 fois, un déficit d'extension 4 fois et chez 3 patients il persistait une douleur locale.