

BOWLER'S THUMB TREATED BY TRANSLOCATION OF THE DIGITAL NERVE

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A case of neuroma of the ulnar digital nerve of the thumb in a bowler was treated successfully by translocation of the nerve beneath the adductor pollicis.

Keywords : Bowler's thumb, digital nerve, translocation.

Mots-clés : «Bowler's thumb», nerf collatéral, translocation.

INTRODUCTION

Bowler's thumb is a neuroma-in-continuity or perineural fibrosis of the ulnar digital nerve at the base of the thumb (1-6) caused by repetitive irritation by the hole in a bowling ball.

The reasonable treatment is to stop bowling or to adapt the equipment. However some patients want a medical solution to avoid interrupting their sports.

CASE REPORT

A 16-year-old female patient consulted the hand clinic for a painful nodule on the ulnar aspect of the base of her right thumb and paresthesias in the ulnar hemipulpa of the thumb. She had previously been operated with a tentative diagnosis of a tendon sheath ganglion, without success. She had been playing 10-pin bowling more than 10 hours/week for several years. On physical examination a tender nodule, with pain radiating towards the ulnar hemipulpa could be palpated. The diagnosis of bowler's thumb was obvious and interruption of the sport was proposed, since several adaptations of her bowling ball had failed.

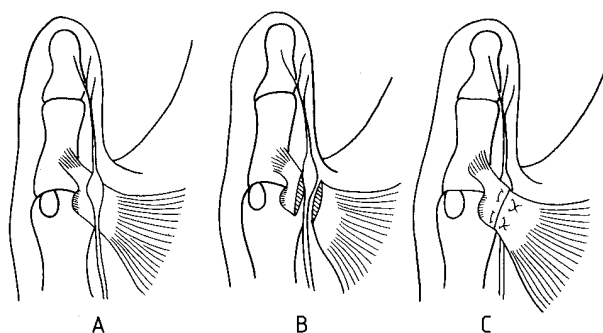


Fig. 1. — Schematic representation of the procedure described (see text).

This solution was refused and she insisted on a surgical solution. We explored the ulnar digital nerve. A fusiform swelling was discovered. The underlying insertion of the adductor pollicis was transected, the nerve was translocated posteriorly and the tendon was sutured superficially over the nerve (fig. 1). Local tenderness decreased immediately after operation. The patient was able to resume her professional activities 5 weeks later. Bowling was possible after 2 months. At one year follow-up she was completely symptom free.

DISCUSSION

Despite the high number of participants in 10-pin bowling, the occurrence of bowler's thumb is

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not frequent. Most authors agree on a conservative approach by adapting the holes of the bowling ball, wearing protective gloves or stopping the sport. In an era when sports and healthy free-time occupations are promoted, more participants become "addicted" and even at an amateur level want to continue to perform.

The treatment of a neurinoma-in-continuity is a challenging problem. Protecting the nerve by covering it with bulky soft tissue (7) or by transposing it into muscle is the most accepted procedure. The same principle can be applied to bowler's thumb, but as far as we could find, only one article reported this technique (2).

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SAMENVATTING

*L. DE SMET, H. VAN RANSBEECK, G. FABRY.
Bowling duim behandeld door zenuwtranslocatie.*

Een neuroma van de ulnaire n. digitalis van de duim bij een bowling speelster werd met succes behandeld door de zenuw diep van de m.adductor pollicis te verplaatsen.

RÉSUMÉ

*L. DE SMET, H. VAN RANSBEECK, G. FABRY.
Traitement d'un «Bowler's thumb» par translocation du nerf collatéral.*

Les auteurs ont traité un neurome du nerf collatéral ulnaire du pouce chez une joueuse de bowling, par translocation du nerf sous l'aponévrose de l'adducteur du pouce ; le résultat a été satisfaisant.