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Letter to the editor

An unusual case of trigger finger

Dear Editor in Chief,

Trigger finger, also known as stenosing tenosynovitis, is a very common condition in hand surgery. Prevalence exceeds 3% in the general population, and up to 20% in diabetic patients [1,2]. Finger snap or locking is caused by narrowing of the flexor pulley sheaths accompanied by hypertrophy and inflammation at the tendon/sheath interface, preventing the tendon from sliding smoothly in its sheath. It classically involves the A1 pulley sheath but it can, less often, occur at the A2 or A3 pulley [3,4].

Although A3 pulley trigger finger is rare, a few cases involving associated osteochondroma have been reported in adults [5,6] and children [7].

In 1990, Rayan [8] reported two cases of combined distal and proximal stenosing tenosynovitis of the flexor digitorum profundus and flexor digitorum superficialis at the A3 and A1 pulleys, involving multiple digits. One of the patients showed persistent triggering after surgical A1 release.

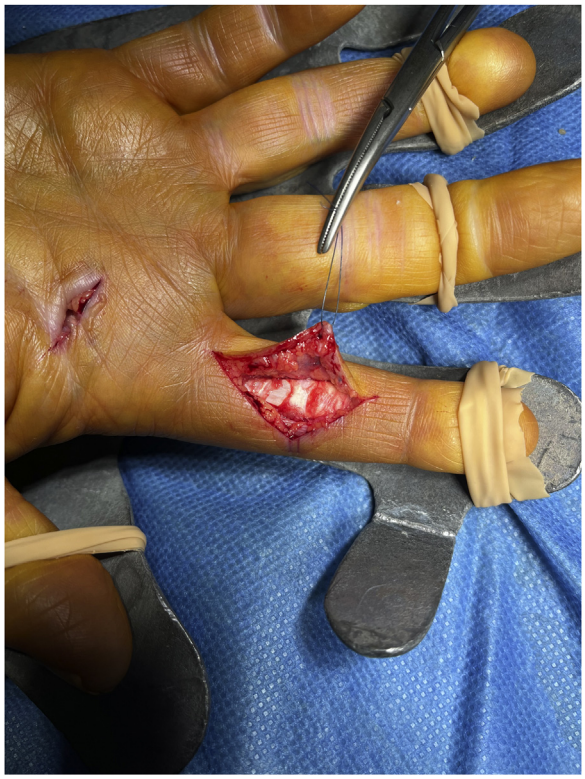

Fig. 1. Thick A3 pulley.

Here, we report a case of isolated A3 pulley trigger finger without other associated conditions or other digits involved.

A 60 year-old female with no relevant medical history presented with pain and locking of her right index finger, of about 1 year's progression.

On physical examination, pain was located at the proximal interphalangeal joint and a mass was palpable on the volar side of the joint. The symptoms were worse in the morning.

Ultrasound examination showed thickening of the tendon sheaths at the A3 pulley with signs of stenosing tenosynovitis.

A Brunner incision was made, centered on the proximal interphalangeal joint. The A3 pulley was thick and the flexor digitorum profundus tendon was bulky and could not glide under the pulley, leading to snapping of the finger. There was no ganglion on the pulley or the tendon (Fig. 1). We made another skin incision, to explore the A1 pulley, which was completely normal.

We performed flexor synovectomy with complete resection of the A3 pulley, which was 6 mm long.

Triggering was resolved by the pulley resection. We checked this passively by pulling on the tendon at the metacarpophalangeal level, finding no more snapping.

Nowadays WALANT is reported to be the optimal mode of anesthesia for trigger finger; however, we performed the procedure under locoregional anesthesia (axillary block).

Histological analysis confirmed the diagnosis of chronic stenosing hypertrophic tenosynovitis.

A3 pulley trigger finger is very rare and, when previously reported, was always associated with tumoral pathology such as osteochondroma.

An intratendinous ganglion can also cause triggering if adjacent to an annular pulley [9,10].

The present case is the first to be reported of isolated hypertrophy of the A3 pulley without any other associated pathologies or other fingers involved.

We would like to draw attention to this particular presentation of trigger finger, to ensure appropriate treatment if it is encountered.

Conflict of interest

The authors declare no conflict of interest.

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