

CASE REPORT

“FLEXOR SHEATH EFFUSION AFTER ASPIRATION OF THE FLEXOR SHEATH GANGLION”

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Introduction

Flexor sheath ganglions commonly known as the pearl ganglions are occasionally treated by aspiration or needling as one of the less invasive means available for treatment besides surgical removal. Injury to the digital nerve can occur but other than this, no significant complications have been reported in the literature. We report swelling of the whole finger due to continuous leak of gelatinous fluid from the ganglion to the flexor sheath after aspiration .

Case Report

The patient was 74 year old lady with complaints of a swelling at the base of the left little finger of only 3 months duration. It had gradually increased in size to attain the size of a pea and was not painful but uncomfortable every time she grasped any object.

On examination, it measured half a cm at the base of A1 pulley of the finger. it was not tender but caused discomfort on deep palpation. The flexor tendon was working normally and swelling was not attached to it. A diagnosis of flexor sheath ganglion was made and it was aspirated in day surgery revealing 1 ml of gelatinous fluid, followed by injection of corticosteroid into the cavity. This resulted in resolution of symptoms initially at the six week follow up. There was a recurrence at 5 months appointment not only at the original site but there was a small lump measuring 0.5 cm on the volar aspect of little finger just distal to the middle finger crease as well. At 8 months follow up, the whole of the little finger had swollen like a sausage but pain free (fig 1 and 2). It would only allow 45° of flexion at the Metacarpophalangeal joint, 45° of flexion at the proximal interphalangeal joint and only 30° at the Distal interphalangeal joint. An attempt was made to aspirate the original ganglion in the clinic which resulted in discharge of about eight mls of thick gelatinous fluid after milking from distal to proximal fashion. The swelling also collapsed completely with instantaneous return of movements. She was reviewed again in two months and as expected the swelling had returned. She was listed for surgery and operated upon in the Day Case Unit. Operative findings were: a flexor sheath ganglion measuring 0.75 cm, attached to A1 pulley which was excised and the flexor sheath full of gelatinous fluid which was milked out. Post operative course was

uneventful and the biopsy confirmed the histological features of a typical ganglion. She did not have another recurrence.

Discussion

Flexor sheath ganglions can be successfully treated by multiple aspirations which has been recommended by some authors as more cost effective treatment than surgery in the first instance (1). Recurrence rate is high after aspiration and hence some surgeons recommend surgery as the first line of management (2). Very few complications have been reported after aspiration including digital nerve damage by the needle itself and recurrence. Our patient was unusual in its presentation. The most logical explanation of the phenomenon seen here is formation of a fistula between the ganglion and flexor sheath by the needle tip. This fistula lead to continuous extravasation of fluid from the ganglion into the sheath causing swelling of whole of the finger.

Another explanation could be flexor tenosynovitis of the sheath which is probably far fetched as the blood markers were normal and the sheath swelled before surgery. First time simple aspiration was enough but recurrence made us operate. As soon as the ganglion was removed, the symptoms settled.

It is not the aim of this report to recommend or discard any line of management but merely to mention another complication possible. This should also lead to further thinking that ganglions may have more than one pathology at associated with them. Some may be secretory in nature rather than a myxomatous change, which would explain continuous fluid formation in our case and some cases of giant ganglions.



Fig 1: Note the swelling in the little finger more pronounced at the end of flexor sheath.



Fig 2: The whole finger is swollen but no signs of inflammation