

A Thorny Affair: Finger Infection Requiring Quaba Flap Coverage

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INTRODUCTION:

Finger infections can result in significant morbidity if left untreated. We report a case of finger foreign body which progressed to an abscess requiring secondary Quaba flap closure due to patient's reluctance for early treatment.

REPORT:

Our patient was a 61-year-old retired police officer with underlying diabetes and hypertension who was pricked by a thorn while gardening. He presented to us with an embedded thorn over the dorsum of his middle finger, entry point just proximal to the distal interphalangeal joint (DIPJ). He was advised for hospital admission for surgical removal of the foreign body which he adamantly refused. Patient returned to us 10 days later with worsening symptoms. Ascending infection was seen extending from the site of thorn entry, up to the 3rd metacarpal phalangeal joint (MCPJ) and the finger infection had progressed into a full-blown abscess.

Patient underwent incision & drainage of the middle finger abscess. Intra-operatively, the thorn was found to have migrated proximally from the initial point of entry and pus collection was seen in the region of P1 of the middle finger. Unfortunately, the skin over the dorso-ulnar aspect of the middle finger was unhealthy, requiring debridement and excision, thus leaving the underlying dorsal expansion hood and apparatus exposed.

Over the next 2 weeks, the finger infection settled with daily dressing and antibiotics. He now had a 3.3 x 1.5cm wound over the dorso-ulnar aspect middle finger, crossing the proximal interphalangeal joint (PIPJ). Patient was counselled for a distally-based dorsal hand flap first introduced by Quaba in 1990. It is a flap derived from dorsal hand skin which is suitable for the current wound also located



Figure 1: Finger abscess with embedded thorn



Figure 2: Quaba flap for closure of wound defect

dorsally. Doppler ultrasound was used pre-operatively to map out the suitable dorsal metacarpal artery and available perforators. We managed to harvest 5cm x 2cm dorsal skin flap while carefully mobilizing the artery so as not to skeletonize it. The flap was then rotated 180 degrees to cover the initial defect. Loose non-absorbable sutures were applied and circulation to the vascular flap was monitored. The donor site was closed primarily. Patient made an uneventful recovery and is currently still under our follow-up.

CONCLUSION:

Prevention is still better than cure. In this case report, early and prompt removal of the foreign body would have saved him from ascending infection and skin necrosis of over the dorsum of his middle finger. Nevertheless, in the event of skin defects requiring flap closure in the hand, a Quaba flap has proved to be a feasible option.

REFERENCES:

1. Quaba AA et al. The distally-based dorsal hand flap. *Br J Plast Surg.* 1990 Jan;43(1):28-39. doi: 10.1016/0007-1226(90)90042-x. PMID: 2310896.