Delayed digital nerve transection as a result of a retained foreign body

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INTRODUCTION

Injury to soft tissue structures from a retained foreign body (FB) and subsequent migration is a potential complication.¹ We report a case of delayed transection of a digital nerve from a retained FB.

Key words: delayed transection, digital nerve, foreign body

CASE REPORT

A right-handed man aged 28 presented with loss of sensation along the ulnar side of his right little finger (Fig. 1); this had occurred following a blow to this part of the finger. Further questioning revealed that 2 years previously, he had suffered an open injury with glass fragments. This had been debrided

and all but one fragment removed. He had normal sensation following the initial injury.

The radiograph revealed this fragment to be lying on the ulnar border of the finger (Fig. 2). On exploration of this 'closed' injury a fragment of glass was found enclosed in fibrous tissue and transecting the digital nerve (Fig. 3). This area was excised and the nerve repaired. The patient went on to regain sensation along the ulnar border of the finger. The histology of the excised area confirmed nervous tissue surrounded with fibrosis, possibly representing the area where the glass fragment had been embedded.

Fig. 1. Loss of sensation on ulnar border of finger.

Fig. 2. Radiograph demonstrating location of glass.

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Fig. 3. Intra-operative location of glass transecting nerve.

DISCUSSION

Lamb & Kuczynski² recommend that an FB in the hand should be left alone. This was based on the premise that lack of care in extracting these objects can result in further damage to deep structures and other complications. However, in hands, FBs will eventually result in problems because of the continued movement and subsequent irritation of the area.³

Although FBs do not have to be removed immediately,⁴ they do represent a source of injury to surrounding structures. It is therefore recommended that, in the hand, FBs be removed later in a formal planned operative approach. This case serves to illustrate the importance of removal of all sharp

foreign bodies from mobile areas as they may cause a 'closed injury' as a result of an extrinsic force.

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