A simple method to optimise Kirschner wire fixation of hand fractures

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Sir,

Kirschner (K-) wiring is a simple but effective method for holding hand fractures in a reduced position, allowing mobilisation. While placing K-wires, it is of paramount importance to get the path of the wire correct to provide optimum fracture reduction whilst subjecting the tissues to minimal heating [1].

We present a simple method to aid the accurate placement of wires with minimal attempts.

A K-wire is used to map out the desired orientation to the wire (Fig. 1) with the aid of X-ray. A marker pen is then used to draw this line on the skin (Fig. 1). The wire is then placed percutaneously using the pen mark as an aid to the three-dimensional spatial awareness needed for competent positioning.

The combination of the two-dimensional image and the addition of tactile “feel” give the surgeon a better idea of wire direction, hopefully eliminating repeated passes of the wire into the bone. We have found this method to be a useful way to give confidence to the junior surgeon under supervision and may be used to construct a plan for more difficult fractures.

Fig. 1 K-wire placed over fractured phalanx to mark out desired direction of placement. Direction of K-wire marked on to skin with pen

If after visualisation under the image intensifier the position is suboptimal, the external lines act as a reference as to where the wire should go.

Conflict of interest We declare no conflict of interest (personal or financial) in the publication of this paper.

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