TECHNIQUE

Non-adhesive skin traction is applied with a 10-cm gap left between the stirrups and the foot (Fig. 2). The end of the stirrups is divided so that it can be folded back medially and laterally (Fig. 3). Wool and the first layer of cast material are applied in the standard manner. The folds of the stirrup are then placed adjacent to the cast material (Fig. 4) and the cast is reinforced with further layers (Fig. 5).

DISCUSSION

This method converts a longitudinal downward force into a compression force around the limb to prevent distal migration of the cast.

References

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Accurate injection of small joints – a useful technique

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Figure 1 Injection of local anaesthetic.

Figure 2 Removal of syringe and backflow of fluid.

Figure 3 Injection of steroid.

BACKGROUND

Small joint injections are frequently necessary. Examples include triamcinolone for osteoarthritis of the hand and feet as well as contrast material injected as part of an arthrogram. There is evidence that accuracy of needle placement varies with physician experience into small joints of the finger.¹ The side-effects of extra-articular triamcinolone are also well documented.² It is important to ensure the material injected is correctly inserted into the joint with some opting for the use of image guidance. Although widely used in hip arthrograms, we present this safe, simple and image-free method for accurate injection into small joints.

TECHNIQUE

A combination of 1% lignocaine and 0.25% marcaine local anaesthetic is prepared. The volume used varies according to the joint being injected. The anaesthetic is injected under the skin, the needle then advanced into the joint and more local anaes-

thetic inserted. (Fig. 1) The needle is left *in situ* and the syringe removed. If the needle is correctly in the joint, a drop of fluid should travel back out of the end of the needle (Fig. 2). Triamcinolone or contrast material can then safely be injected directly into the joint (Fig. 3).

DISCUSSION

The joint capsule is an enclosed space. As the local anaesthetic is injected into this space there is an increase in pressure which pushes fluid back out of the needle when the syringe is removed. This simple and accurate method ensures that an injection into a small joint is placed intra-articularly, proving also to be relatively painless.

References

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A modified switching stick technique to facilitate portal access in elbow arthroscopy

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BACKGROUND

We have observed that it can be difficult to gain proper port access in elbow arthroscopy due to limitations in the available equipment. When performing procedures that require the use of larger arthroscopic equipment such as a shaver or bone burr, it can be impossible to exchange the tools without losing access to the joint. We have found that the bone burr is too large to be inserted through a small (2.7 mm) elbow arthroplasty cannula. A cannulated Kirschner wire (K-wire) has been suggested to allow safe access in knee arthroscopy.¹ A Nitinol wire (Smith and Nephew, MA, USA) has been recommended for use as a switching stick in hip arthroscopy.² We have devised a technique that allows for easy siting of a portal on demand, changing devices or as a switching stick for guiding larger instruments.

Figure 1 Sequential photographs of the insertion of the K-wire and cannula into the elbow joint. (A) K-wire introduced into joint; (B) cannula introduced over K-wire and (C) cannula *in situ*.

Figure 2 Sequential photographs of the K-wire and bone burr in situ during radial head excision. (A) K-wire in joint; (B) K-wire and cannula in joint; and (C) bone burr in joint.

TECHNIQUE

Having sited the arthroscopic camera in the usual fashion, a standard 1.6-mm K-wire is advanced under direct vision through the skin into the joint space to provide a portal on demand (Fig. 1). Having gained access to the joint with the K-wire, it is used as a guide over which cannulated equipment can be easily and directly advanced into the joint (Fig. 2).

DISCUSSION

This is a simple technique that allows safe access to smaller joints such as the elbow. It should be noted that this technique could be applied to other small joints such as the wrist and ankle. It uses only one K-wire and is a simple and cost-effective solution to portal access.

References

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