kidney dish aids reduction by placing the wrist in palmar flexion. The c-arm can now be brought in from the patient's lateral side. The assistant can rotate the arm, whilst maintaining traction, to get 90° views of the wrist. Once adequate reduction is achieved, K-wires can be inserted in the standard fashion.

DISCUSSION

We have used this technique for the above procedure and also application of external fixators.

Reference

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A revised guide-wire technique for urethral catheter insertion

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BACKGROUND

A common call to an SHO/registrar covering urology is the inability to pass a urethral catheter, either to relieve urinary

Figure 1 Photograph showing the urinary catheter being cut longitudinally which is correct.

Figure 2 Photograph demonstrating the smooth shape of the catheter tip with a guide-wire after a longitudinal incision.

obstruction, or occasionally for intensive care monitoring of urine output. Often, several attempts have been made and additional techniques may be required. Flexible cystoscopy with insertion of a guide wire and rail-roading of a catheter over the guide wire is an easy and effective technique that is often employed to overcome this problem.^{1,2}

TECHNIQUE

In order for the urethral catheter to be rail-roaded, the end of the catheter has to be cut to allow the guide wire to pass through. This needs to be done in such a way as to prevent any disruption to the balloon mechanism. It has been our experience that operators cut the end of the catheter transversely. This results in a sharp edge, which produces difficulty when trying to advance the catheter and causes additional trauma. If the tip of the catheter is cut longitudinally (Fig. 1), the guide wire can be passed through the catheter and the natural manufactured shape of the catheter with a smooth edge is maintained (Fig. 2), thereby allowing easy atraumatic advancement.

DISCUSSION

It is important to document in the notes that the end of the catheter is cut so that when the catheter needs replacement, a

guide wire can simply be inserted before removing the catheter thereby allowing a new catheter to be rail-roaded over the guide wire again. If this is managed correctly, repeated flexible cystoscopy should not be required to re-introduce a guide wire every time the catheter needs to be changed.

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An inexpensive ultrasound-guided central venous puncture simulator

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BACKGROUND

NICE guidelines state that 2-D ultrasound should now be used for the venous puncture step in the insertion of all internal jugular central venous catheters and considered in the placement of subclavian/femoral catheters.¹ Using ultrasound to locate and puncture the vein involves delicate operator co-ordination between the hand holding the needle and syringe, the hand holding the probe over the vein and the eyes watching the image on the screen of the portable ultrasound machine. These skills naturally take time to master. A simple, inexpensive simulator for ultrasound-guided venous puncture is presented which allows surgical trainees to practice their hand-eye co-ordination in

Figure 1 Simulated vein and artery lying side by side used in the model.

Figure 2 Advancing the needle towards the vein under ultrasound guidance.

locating and puncturing the vein before attempting the procedure under appropriate supervision in patients.

TECHNIQUE

The simulated vessels are constructed by cutting the finger portions from small latex gloves, filling them with water and tying a knot in the end. These are then glued together to lie side by side analogous to the anatomical arrangement of vein and artery. (Fig. 1). The 'vessels' are then placed in the bottom of a small kitchen storage tub. The tub is filled with standard lubricating jelly to simulate the surrounding tissues. A further glove is then placed around the tub and tied to ensure a good seal to stop leakage of the jelly. The 'vessels' cannot be seen through the glove looking into the model. In exactly the same fashion as performing the procedure in patients, the probe is placed on the top of the tub allowing visualisation of the simulated vein and artery below (Fig.

Figure 3 Ultrasound image of needle approaching simulated vein on model.