

Fig. 6. Guidewire through dilator and peel-away catheter.

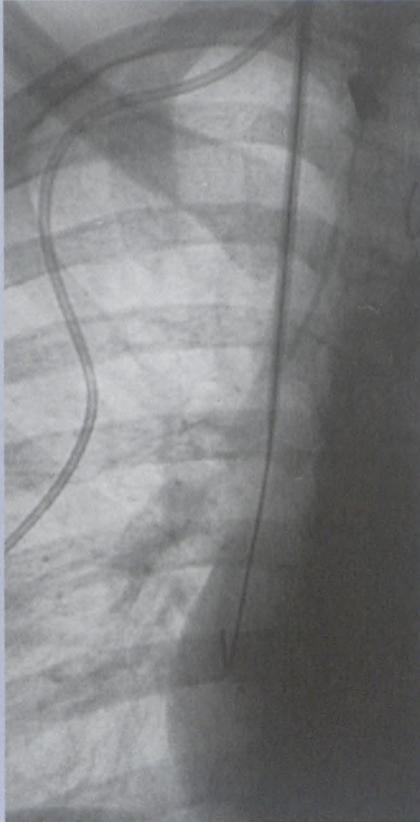


Fig. 7. Tunneled catheter with dilator and peel-away sheath in place.

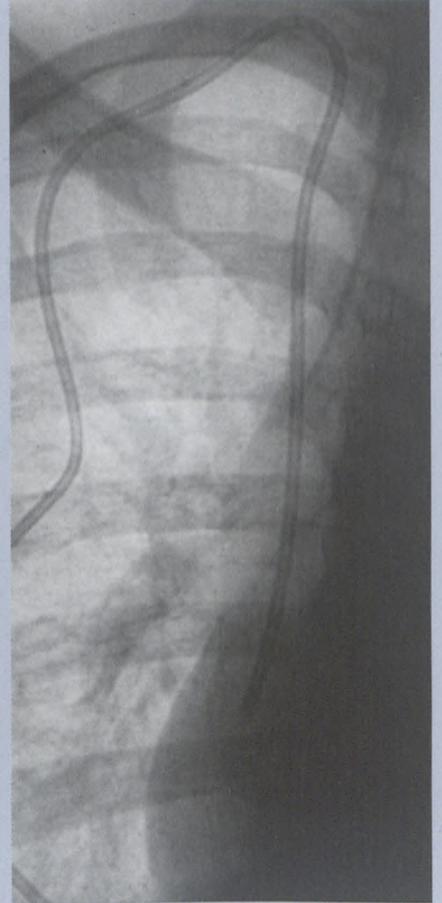


Fig. 9. Haemodialysis catheter in correct position.

to prove the patency as well as the exact position of the line (Fig. 9).

Eight children and 52 adults underwent the procedure. The puncture areas included the right jugular ( $N = 35$ ), left jugular ( $N = 14$ ), right subclavian ( $N = 2$ ), left subclavian ( $N = 1$ ), left femoral ( $N = 4$ ) and right femoral ( $N = 4$ ). Two patients received multiple punctures, 2 lines were used for 1 patient, and 6 venograms were done. No sepsis was reported after the follow-ups of 1 week and 1 month.

As can be seen, the right internal jugular vein is the preferred site of puncture because of the easier placement of the guide wires and catheters from this position.

Placement of silicone catheters in an interventional unit is a good alternative to provide easily accessible ports for haemodialysis. There is a low complication rate, e.g. accidental

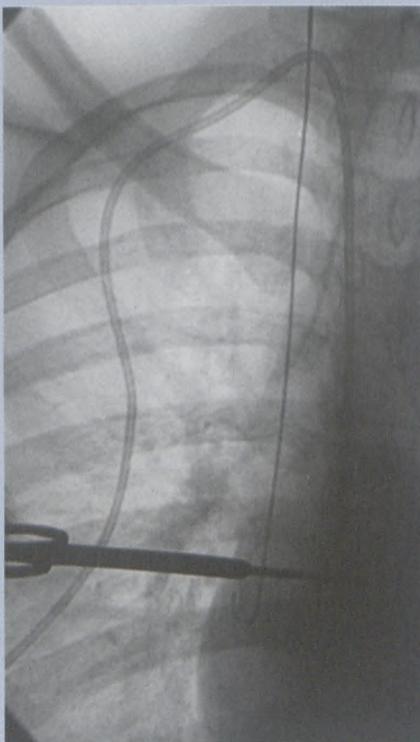


Fig. 8. Determine the length of the catheter.

puncture of the carotid artery or pneumothorax, because the whole procedure is done under direct fluoroscopy and ultrasound guidance. No sepsis within 1 month of the procedure was reported.