## Appendix 4 Advancing the Cannula: 4 options (Ref46)

### 1 Floating the Cannula into the vein

With this method you will remove the stylet before fully advancing the cannula. It is a good technique to use if you are inexperienced-you will be less likely to puncture the vein’s opposite wall because you will advance the cannula only after you see adequate blood return (secondary flashback.) Also the fluid flow helps to float the cannula into place.

Perform venepuncture and advance the cannula about one third to a half of its length into the vein or when you observe primary flashback in the hub.

Place a sterile gauze or cotton wool under the catheter hub to catch any blood that escapes when you remove the stylet.

Release the tourniquet and remove the stylet.

Attach the tube and start the IV infusion at a slow rate.

Use one hand to maintain vein stretch while advancing the cannula with the other hand.

### 2 The two-handed technique

Many practitioners use this technique because the stylet partially obstructs the cannula as it is advanced. This method reduces blood spillage.

- Insert the cannula into the vein approximately half its length or until primary flashback is visible in the hub.
- With one hand hold the hub of the cannula while retracting the stylet about halfway with the other hand.
- While maintaining vein stretch advance the cannula until it is inserted fully.
- Remove tourniquet. If the vein is small leave the tourniquet tied to increase vein size during cannula advancement.
- Remove the stylet and attach the IV tubing or flush with 1-2mls of 0.9% normal saline and attach the T connector.
### 3 One-step technique

You might choose this method if you are experienced in venepuncture and the vein you are accessing is straight, even and superficial. An experienced, skilful practitioner can place the cannula in the vein lumen with one deft motion without injuring the vein.

- In one step enter the skin and advance the cannula into the vein completely up to the hub.
- Remove the stylet and attach the IV tubing or T connector.

### 4 Pushing the cannula off the stylet

This technique is recommended for cannulae with a raised lip on the hub, e.g. quik-cath®.

- Advance the cannula halfway into the vein.
- Pressing your forefinger or thumb against the hub’s lip slide the cannula forward, so it moves off the stylet and into the vein.
- Discard the stylet, remove the tourniquet, and attach the IV tubing or T connector.