

Seldinger Technique for Introducing Catheters

Percutaneous vascular catheterisation, as described by Seldinger (Acta Radiologica, 38 [1953], 368-376), has been used successfully for many years. The technique allows entry into an area without a cutdown and, because small gauge needles are used, there is minimal trauma to surrounding tissue. More recently, critical care physicians have applied the Seldinger technique to the introduction of various types of catheters.



Seldinger Technique - Step 1



Seldinger Technique - Step 2



Seldinger Technique - Step 3



Seldinger Technique - Step 4



Seldinger Technique - Step 5



Seldinger Technique - Step 6

- Step 1.** Insert needle into vessel.
- Step 2.** Straighten J-wire, using the adaptor, and insert into needle. Stabilise needle with the other hand at all times to prevent it from dislodging. Advance wire into vessel.
- Step 3.** Remove needle and wire cover. The guide wire needs to be securely held during the following procedures to limit further advancement into the vessel.
- Step 4.** Advance dilator over the wire 1 to 1½ inches into insertion point and rotate back and forth. Remove dilator. This opens up the site to facilitate the introduction of the catheter.
- Step 5.** Advance catheter over the guide wire into the vessel.
- Step 6.** Remove guide wire, flush and secure catheter to animal with sutures. Wrap to provide additional stabilisation.