

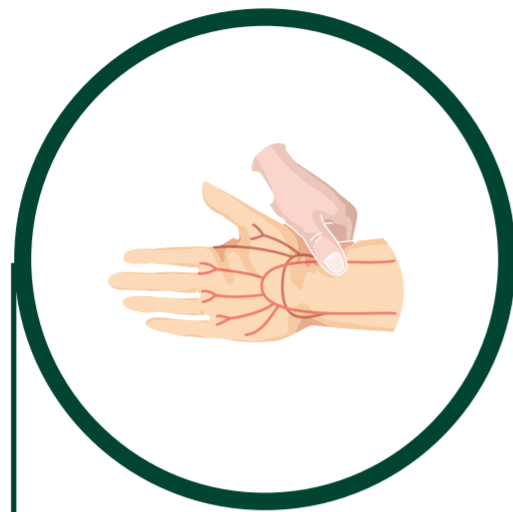
Do you know the **RADIALS** acronym?



R

Ratio (Catheter to vessel)

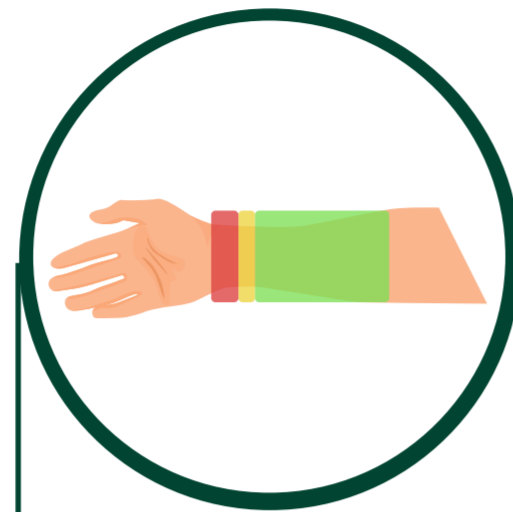
The catheter should take less than **45%** of the artery lumen.



A

Allen's Test & Assessment

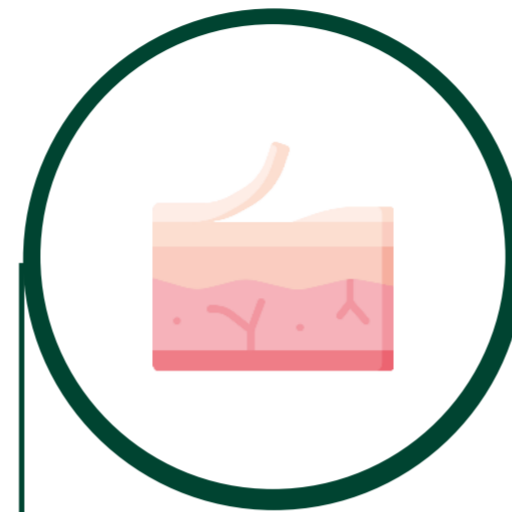
Assess the region & evaluate for collateral circulation.



D

Distance from the wrist

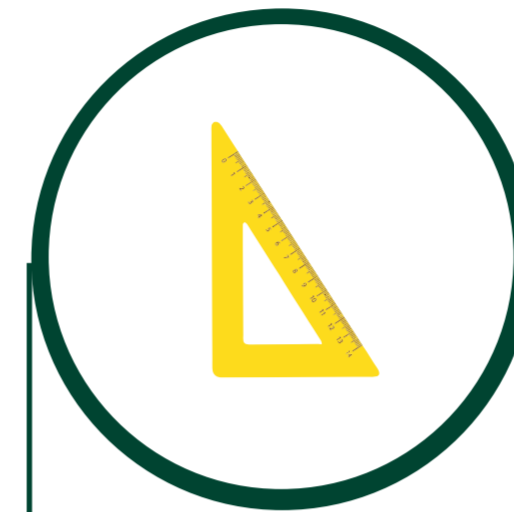
To **reduce mechanical failure or instability caused by flexion** or movement, the insertion site should be **>4cm proximal from wrist crease**.



I

Integrity of the skin

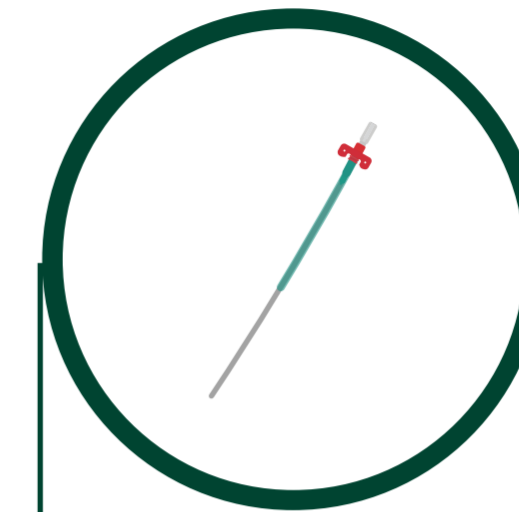
Inspect wrist & forearm for any redness, bleeding, haematoma or localised swelling.



A

Angle of insertion

To **reduce the risk of catheter kinking and so a device failure, insert with ultrasound <30°**. Avoid >45°.



L

Length of the catheter

Consider total catheter length, relative to artery depth & angle insertion. **65% of the catheter's length should be inside the artery**.



S

Securement

The standards of practice recommend to use a sutureless securement method. (adhesive securement device, glue etc...)

Avoid the use of sutures as they are not an effective alternative to a securement method. Indeed sutures are associated with needlestick injury and increase the risk of catheter infection.



Adhesive fixation devices are a great alternative to suturing, with a complication rate of 21.3% compared to 47.2% associated with suturing.