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# THE SIP PROTOCOL

A GAVeCeLT bundle for the safe  
implantation of PICCs

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# Key to uneventful insertion:

Use a bundle of evidence-based, cost-effective strategies:

- US assessment

- US guidance

- Intracavitary EKG guide

- microintroducer technique

- sutureless securement

- .....

# The SIP protocol

1. Hand washing, aseptic technique and maximal barrier protection
2. Bilateral US scan of all veins at arm and neck
3. Choice of the appropriate vein at midarm (vein mm = or > cath Fr)
4. Clear identification of median nerve and brachial artery
5. Ultrasound guided venipuncture
6. US scan of IJV during introduction of the PICC
7. EKG method for assessing tip position
8. Securing the PICC with a sutureless device

# Goals of the SIP bundle

- Minimize complications related to venipuncture:
  - Failure, repeated punctures, nerve injury, arterial injury
- Minimize malpositions
- Minimize venous thrombosis
- Minimize dislocation
- Minimize infection

