Chest Drain Insertion Checklist

Are you suitably trained and competent to perform the procedure? Obtain supervision if not.

Insertion of a chest drain in a non-emergency situation should directly involve a consultant in the decision making.

Do not delay treatment in an emergency situation if you are competent to perform chest drain insertion.

Pre-procedure

- Confirm patient identity/ consent
- Confirm correct side of drain insertion (review imaging and examine patient). Mark side.
- Confirm coagulation[1] & drug chart reviewed
- Confirm allergy status
- Select appropriate drain (Argyle[2] or Seldinger) and prepare equipment
- Establish IV access and monitoring (SpO2, ECG, NIBP minimum)
- Trained assistant present throughout procedure
- Prepare analgesia/sedation

Performing Drain Insertion

- Full surgical scrub
- Confirm anatomy. Use USS for Selldinger if trained. Identify safe triangle (see reverse).
- **Argyle drain**- Skin incision followed by blunt dissection with finger and Spencer Wells forceps. Confirm pleural space with finger sweep. Do not use trocar. **Seldinger-** As per usual Seldinger technique. Ensure removal of guidewire
- Estimate depth of drain insertion[3].
- Connect to underwater seal drain and confirm oscillation
- Secure in place with suture[4] and dressing

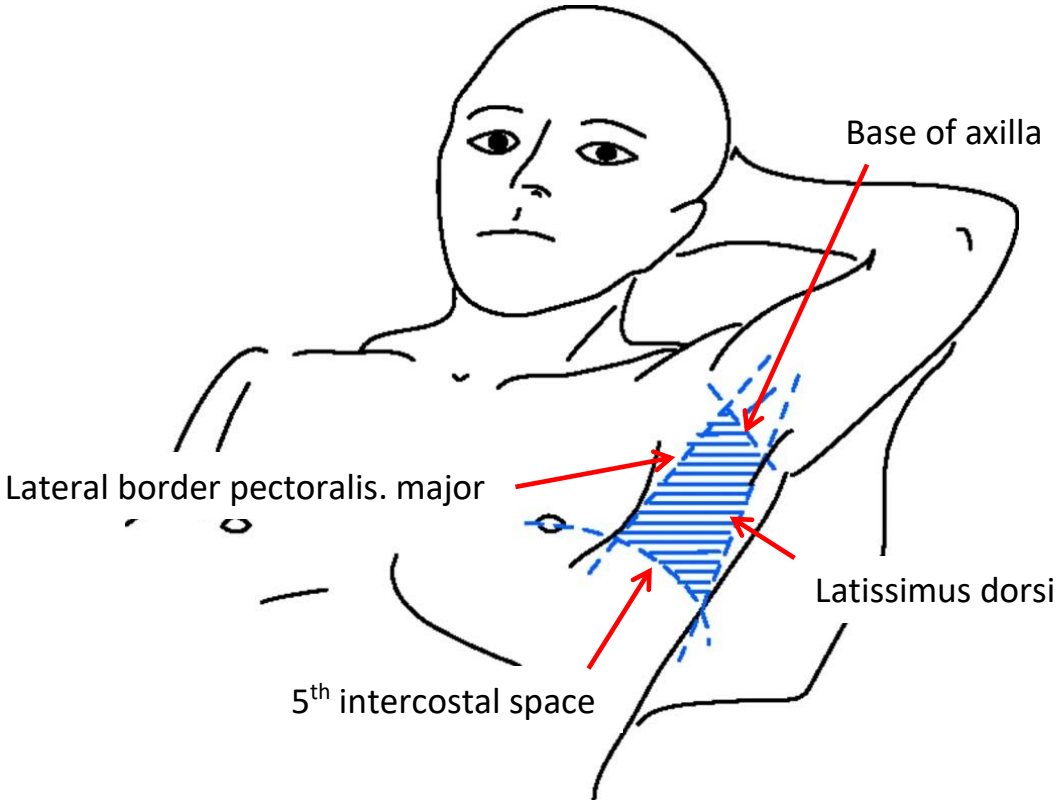
Post-procedure

- Confirm drain still swinging after securing and dressing
- Request CXR for drain position, lung expansion and any complications
- Operator responsible for sharps and guidewire disposal
- Document procedure and post-procedure instructions for drain management on EPR (Search 'line insertion')
- Ensure adequate analgesia prescribed
- Handover to team providing ongoing care. Including frequency of observations, define parameters to prompt medical review.

See overleaf for expanded guidance notes.

Please document insertion on the chest drain document (IN THE LINES SECTION) on EPR

Triangle of safety for insertion of chest drain



1. **Coagulation**

BTS guidelines advise non-urgent chest drains should be avoided where INR >1.5 or platelets <50.
Where emergency chest drain insertion is indicated in a coagulopathic patient- ensure consultant involvement, insertion performed by most experienced available operator, use ultrasound (if Seldinger) and liaise with haematology to discuss correcting coagulopathy.

2. **Drain size**

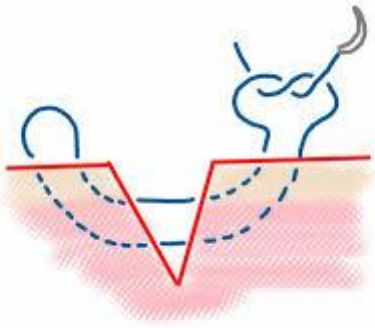
20-32Fr is appropriate Argyle drain for most adult patients
12Fr for Seldinger typically

3. **Drain depth**

Approximately 12cm in normal BMI.
Approximately 16-20cm in raised BMI.
cm markings on Argyle drain are from the **furthest side hole from the tip**, not the tip of the drain

4. **Suturing drain**

Use a non-absorbable suture. Preferably use a vertical mattress suture technique.



See intranet for full chest drain guideline (GSCCrit 03(17))