Intercostal catheters

Requirements for safe insertion

- Familiarity with the equipment available in your institution
- Developing the skill through training and practice
- Selecting the right patient



Large bore ICC	Small bore ICC
Most common type used in children	Most common catheter used in neonates
Considered more effective in critical trauma – for rapid air and blood evacuation	Should be considered in stable trauma - can drain both air and blood
Open surgical approach	Seldinger technique
More invasive and painful	Less invasive and well tolerated
More scarring	Less scarring



Finger Thoracostomy

- Invasive procedure used to **decompress a possible tension pneumothorax** urgently (as an alternative to needle thoracentesis)
- Involves **rapid sharp incision down to rib**, **5**th **or 4**th **IC space**, anterior to midaxillary line, and **blunt penetration of the rib space and pleura** by a gloved finger.
- Withdrawal of the finger then allows rapid release of a tension pneumothorax or on occasion a tension haemothorax



Indications	Cautions and Considerations
High suspicion of tension haemo/pneumothorax, with critical clinical instability	Used inappropriately in spontaneously breathing patient causes 'open pneumothorax' and may collapse lung
As part of Traumatic Cardiac Arrest (TCA) where tension haemo/pneumothorax may be responsible	Not as management for any pneumothorax, and should always have
For urgent intervention in a deteriorating ventilated patient where tension haemo/pneumothorax may be the cause	Likely more effective in the school age child, and significantly more difficult and less appropriate in infants

