# Resuscitative ThoracotomyGuidelines for North Bristol Trust

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| **Further information:** | |
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**INDICATIONS FOR RESUSCITATIVE ED THORACOTOMY**

**1. Indications for ED resuscitative thoracotomy by Trauma Team Leader (TTL) in major trauma in adults and to include adolescent penetrating trauma**

- TTLs will perform a thoractomy in penetrating trauma with no pulse but evidence of electrical activity where there has been less than 15 mins loss of output.
- The approach will be bilateral thoracostamies, extended to make a 'clam shell'.The purpose will be to release tamponade and control cardiac bleeding – no other procedures will normally be undertaken
- Thoracotomy can be considered for patients following blunt trauma for proximal control, to facilitate resuscitative laparotomy. This is a very rare event, in a patient with isolated injuries below diaphragm, who is only transiently responding to a massive transfusion.
- If a thoracotomy is performed, the on call Thoracic Surgeon at UH Bristol should be contact who will attend to assist with the management of the patient.

**2. Stable penetrating trauma, suspected cardiac tamponade**

- Suspected cardiac tamponade but maintaining output on arrival and immediate assessment. Contact on call Thoracic Consultant at UH Bristol regarding moving to theatre at NBT or transfer to UH Bristol for thoracotomy.
- If the patient stays at NBT, the TTL to accompany and wait with patient. Prepare for thoracotomy in theatres with theatre staff. TTL to proceed to clam shell thoracotomy for relief of tamponade if cardiac output lost before arrival of Thoracic Consultant.
- General Surgical Registrar to attend theatre also

**3. Penetrating thoracic trauma - Deteriorating patient**

- In a patient with suspected cardiac tamponade who quickly deteriorates in the ED resus after arrival, the TTL may proceed to ED thoracotomy based on patient presentation and speed of deterioration.
- Thoracic Surgical Consultant on call for UH Bristol to be contact and ask to attend. (ext 76000 – BRI Switchboard)
- General Surgical Registrar to attend ED

***If a TTL if to undertake a resuscitative thoracotomy for penetrating injury and suspected cardiac tamponade assistance will always be requested from other surgical staff on site i.e. general surgical teams whilst CT team awaited***

***The equipment in the Emergency Department for thoracotomy consists of 2 x thoracostomy packs, gigli saw and a pair of tuff cut scissors. 'Major Chest Sets' are available in level 2 theatre suite.***

**4. Indications To Call Thoracic Surgical Consultant**

**i) Indications to call pre-arrival of patient**

- Request from HEMS Consultant

**ii) Indications to call Thoracic Consultant after patient arrived**

- Haemodynamically unstable patient with suspected:
    - Penetrating trauma to torso with suspected internal thoracic injury

- CT evidence of ongoing intra-thoracic haemorrhage where interventional radiology is not felt to be appropriate
- Cardiac tamponade

iii) Indicate to discuss case with Thoracic Consultant on call

- Acute ECG changes related to myocardial trauma
- Chest drain inserted for trauma with ongoing air leak or blood loss
- Flail chest with respiratory compromise (discuss during working hours only).

**6. Review and governance**

All thoractomies performed in the ED will be reviewed in the Monthly M&M trauma meetings with constructive feedback offered.

**7. On going CPD/skills update**

The Trust will provide a biannual update for TTL's including a practical session.
General Surgical Registrars and Emergency Medicine Registrars rotating through Southmead Hospital Major Trauma Centre should have thoracotomy training.