<table>
<thead>
<tr>
<th>Lightly blood-stained secretions only?</th>
<th>□</th>
<th>Early (days 1-3) – likely benign - observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>Late (after day 3) – senior review</td>
<td></td>
</tr>
</tbody>
</table>

### Significant frank blood?

#### Call for help
- 1. ICU consultant and senior nursing staff
- 2. ENT surgeon – on call consultant at John Radcliffe will coordinate. May also be one in clinic or theatre on site (put days here)
- 3. General surgeon
- 4. Senior anaesthetist

#### 100% oxygen
- □ Or high flow via trachy mask

#### Inflate cuff
- □ Temporary over-inflation can be considered (usually at least 20 ml (for Portex tubes)

#### Sit nearly fully upright
- □ 45 degrees if hypotensive

#### Suction via tracheostomy
- □ Large gauge catheter to retrieve clots

#### Attach water’s circuit or self-inflating bag, and end-tidal monitoring
- □ Consider assisting ventilation or take over

#### Finger pressure in sternal notch or at bleeding point if obvious
- □ If heavily sedated, consider packing pharynx

#### Suction pharynx
- □ Remove clots

#### Next measures
- □ 1. Kaltostat or adrenaline-soaked ribbon gauze - tuck into trachy wound.
- 2. Inject lidocaine + adrenaline 1:200,000 around trachy site.
- 3. Sedation if coughing is excessive or struggling with ventilation (+/- muscle relaxant)
- 4. Correct known coagulopathy or reverse anticoagulants where possible

### Bleeding still through tracheostomy despite cuff inflation?

#### Profuse?
- □ Consider intubation via mouth and:
  - distal balloon placement
  - Intentional endobronchial intubation
  - double-lumen tube
  - bronchial blocker.
  Or consider palliation.

#### Not profuse but not settling?
- □ Adrenaline nebs
  - IV +/- nebulized tranexamic acid.
  Consider plans as for profuse bleeding.

#### Haemostasis achieved?
- □ Bronchoscopy and upper airway scope
- CXR
- Physiotherapy
- Consider possibility that it was a ‘herald bleed’ (re TIF below)

### Causes

#### Early
- Suction or movement of tracheostomy

#### Late
- Granulation tissue
- Stoma site infection
- Tracheo-innominate fistula

#### Also consider:
- Bleeding from non-trachy surgical site if present and nearby.
- Upper respiratory tract bleeding (eg epistaxis)
- Haemoptysis unrelated to tracheostomy