GUIDELINE: TUBE TAMPONADE IN BLEEDING VARICES

Indications:

- Failure of control of bleeding at endoscopy:
  - Therapeutic failure
  - Inadequate therapy
  - Inability to apply therapy
- In severe bleeding a decision to insert tube, prior to endoscopy, is weighed against risks in an emergency situation eg. proportion of bleeding in liver disease not variceal, pre-endoscopy insertion has higher complication rate.

Contraindications:

- Esophageal stricture
- Recent EG junction surgery

Complications/risks:

- Esophageal perforation
- Aspiration
- Asphyxiation
- Pain
- Pressure necrosis: nose, lips, tongue

Preparation:

Equipment tray:

- Mouth guard
- 50 ml syringe
- 50-60 ml irrigating syringe
- 4 tube clamps
- Scissors

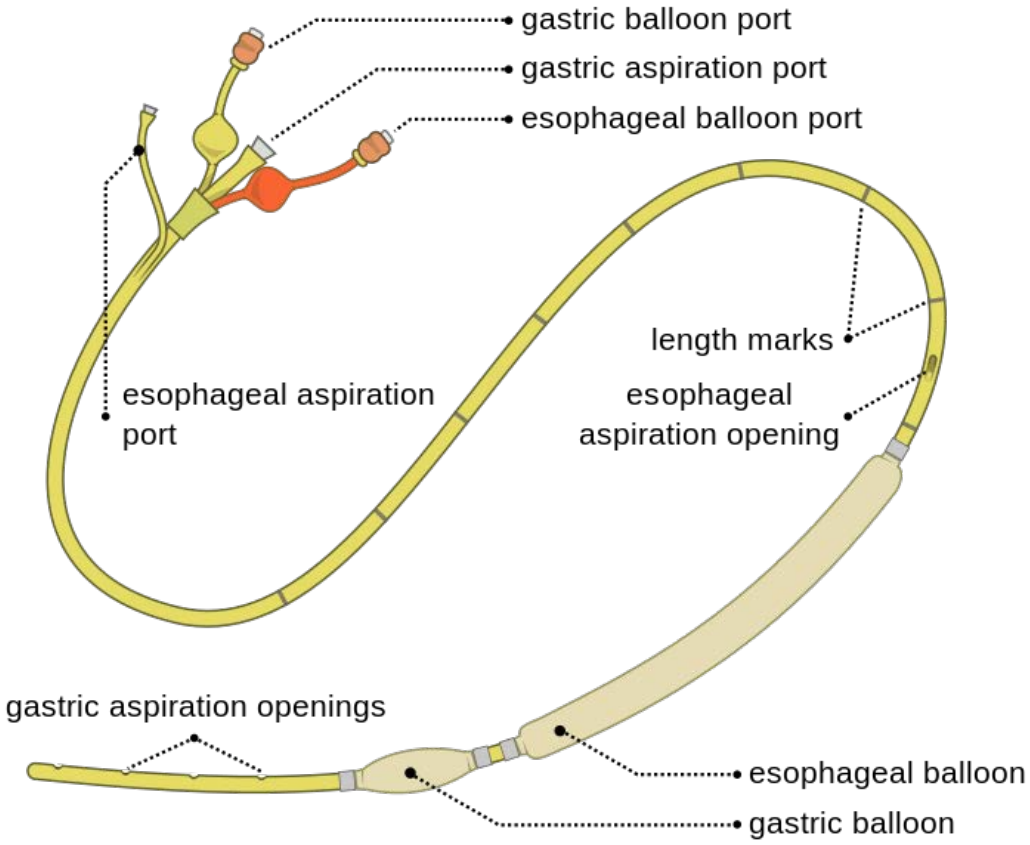
Recommendation:

- Check tray regularly.
- Be familiar with the tube and equipment.
- Check tube before insertion, familiarise with the ports/balloons, inflate balloons, options for clamping and unclamping ports/balloons.

Tube choice:

- Sengstaken-Blakemore.
- Minnesota.
- Linton-Nachlas (gastric varices).

Sengstaken-Blakemore Tube:



Insertion technique:

- Low threshold for airway protection.
- Local anesthetic +/- sedation or full general anesthetic.
- Left lateral/semi-prone position, insert mouthguard.
- Lubricated tube is passed, via mouth, to 50-60 cms.
- Aspirate gastric and esophageal ports to dryness.
- Inflate gastric balloon with air to 100 mls.
- If pain deflate immediately and reinsert. (If sedated/ventilated and cannot rely on patient ability to express symptoms of pain, measure gastric balloon pressure on inflation prior to insertion, if, following insertion pressure in gastric balloon >15 mmHg than readings when checked prior to insertion, deflate and reinsert).
- Inflate gastric balloon to 250-350 mls.
- Withdraw until resistance at 30-40 cms.
- Apply traction with 500 ml bag of fluid.
- Aspirate gastric and oesophageal ports every 15 mins or apply suction.
- Tube position check: Chest X Ray

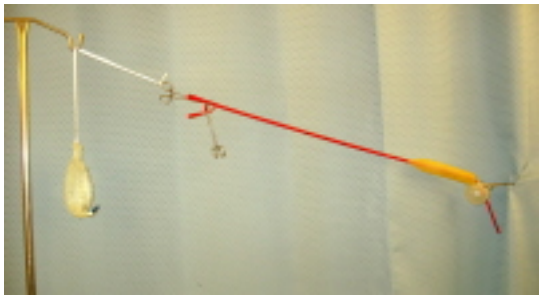
Continued bleeding:

- Check:
    - Adequate traction and correct tube position.
    - Octreotide infusion continued.
    - SBP 90-100 mmHg, pulse<100/min.

        - Correct coagulopathy.
    - Esophageal balloon inflation is rarely needed.
    - If required inflate esophageal balloon to 30-40 mm Hg.
    - Check esophageal balloon pressure hourly.
    - Aspirate gastric and esophageal ports.
    - Deflate oesophageal balloon every 6 hrs.
    - Endoscopy/transfer for endoscopy.

Tube monitoring and patient turning:

- Pain: deflate and reposition immediately.
- Severe pain/asphyxiation: cut tube proximal to point of bifurcation of port exits and remove when deflated and no resistance.
- Check traction distance, 30-40 cms, at regular intervals is stable, if not then tube deflation/migration may have occurred, deflate, remove and reinsert.
- Turning the patient:
    - Provided traction is maintained by hand patients can be turned from, supine, right and left, lateral and semi-prone positions.
    - Suspension devices can be useful to maintain position (see below).



Patient transfer:

- Airway protected
- Bleeding controlled
- Traction applied
- Patient position:
    - Intubated: left lateral or supine.
    - Unprotected airway: left lateral/semiprone
- Duration of transfer with balloon inflated
    - Gastric traction up to 24 hours
    - Esophageal deflation after 6 hours

Recurrent bleeding:

- Apply traction and repeat endoscopy.

Tube removal:

- No further bleeding after 24 hours: take traction off gastric balloon.
- No further bleeding after 3-6 hours: remove tube.
- Repeat endoscopy.

PD Mullins December 2013