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

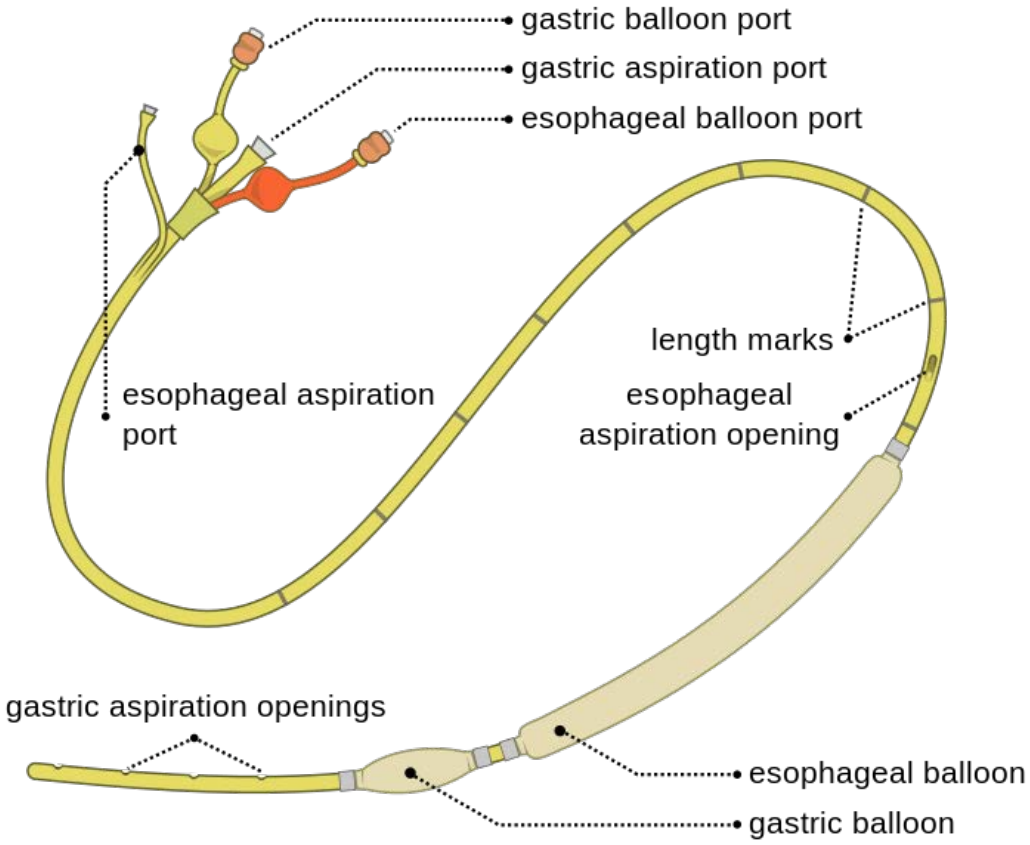
Recommendation:

- 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:

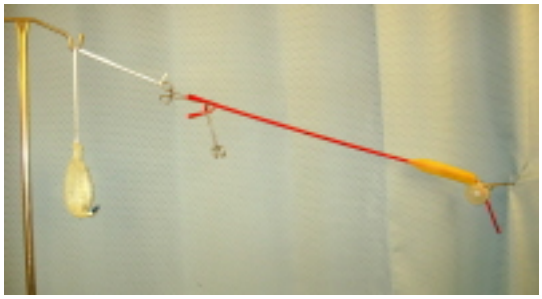
- Low threshold for airway protection.
- Local anesthetic +/- sedation or full general anesthetic.
- Left lateral/semi-prone position, insert mouthguard.
- Lubricated tube is passed, via mouth, to 50-60 cms.
- Aspirate gastric and esophageal ports to dryness.
- Inflate gastric balloon with air to 100 mls.
- If pain deflate immediately and reinsert.
- (If sedated/ventilated and gastric balloon pressure is >15 mmHg than readings when checked prior to insertion deflate and reposition).
- Inflate gastric balloon to 250-500 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.

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.
- Repeat endoscopy.

Tube monitoring and patient turning:

- Tube position check: Chest X Ray
- 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).



Recurrent bleeding:

- Apply traction and repeat endoscopy with no tube traction, or tube removed.

Tube removal:

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