NHS Greater Glasgow and Clyde

Protocol for Insertion of a Sengstaken-Blakemore Tube (SBT)

Indication: Life-threatening variceal haemorrhage with signs of circulatory collapse

Equipment:

- Cliny Sengstaken-Blakemore Tube (Fig.1)
- 50ml leur lock syringes x1
- 50ml Catheter tip syringe x1
- Wooden tongue depressors x2
- Tape
- Visor
- Lubricant (eg Optilube or KY jelly)

Procedure:

1. Ideally the patient's airway should be secured with endotracheal intubation
2. Manually inspect the tube to ensure it is intact, test the gastric and oesophageal balloons with 50ml of air and deflate both fully.
3. Spigot the aspiration channels.
4. Lubricate the Sengstaken-Blakemore tube.
5. Insert the Sengstaken-Blakemore tube to at least 50cm via the mouth and remove the guide wire. If the tube is not straight it is not possible to remove the guide wire. If the guide wire cannot be removed with ease do not proceed to step 6, pull back the tube to 45cms and try again. If unsuccessful remove the tube and attempt insertion again.
6. Inflate the gastric balloon with 300ml of air (Fig.2). Do not routinely inflate the oesophageal balloon.*
7. Pull back on the tube against the gastroesophageal junction and secure it at the patient's mouth with tongue depressors and tape to create traction (Fig.3).
8. Arrange an urgent portable CXR to confirm the position (Fig.4).
9. If not already aware or present, urgently contact the gastroenterology consultant on call for GI bleeding to arrange endoscopy.
10. The insertion should be clearly documented in the medical notes including the distance the tube is inserted to.
11. Ensure that medical treatment (with terlipressin and antibiotics), and resuscitation (with IV fluid and blood products) is ongoing as per the upper GI bleed protocol.

* If the oesophageal balloon is to be inflated, this should only be done on the instruction of a gastroenterologist. If you are in a remote centre without an on-call gastroenterologist, please contact your local TIPSS centre for support and advice.

Post Insertion Care

1. The patient should be monitored closely for signs of bleeding.
2. The oesophageal port should be aspirated hourly. If fresh blood is aspirated please contact senior medical staff and the gastroenterology team.
3. The gastric port should be left on free drainage. If fresh blood is noted please contact senior medical staff and the gastroenterology team.
4. Please confirm and document the position of the tube at the mouth hourly. If there is any change please contact senior medical staff as the tube may have slipped and no longer be providing adequate tamponade.
5. If patient is transferred from another hospital then repeat CXR should be performed on arrival to confirm the position of the tube (Fig.4). The oesophageal balloon should also be aspirated to ensure it is empty.

Removal

The Sengstaken-Blakemore Tube should remain in situ until endoscopic control of bleeding is obtained or TIPSS procedure has been completed. The tube should be removed within 24 hour.

Fig.1 – Cliny Sengstaken Blakemore Tube (SBT)

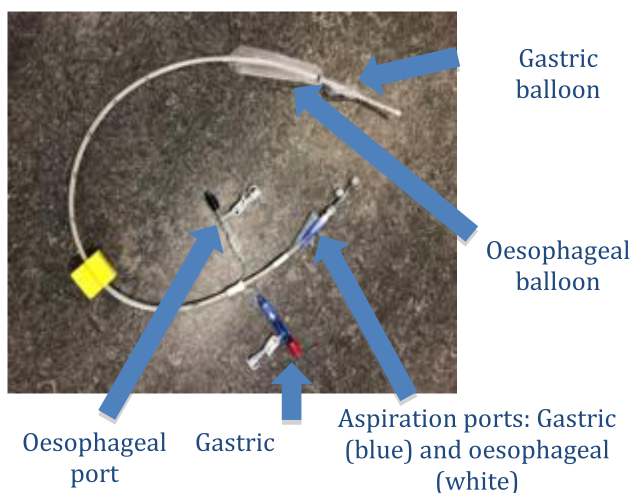

Fig.2 – Illustration of SBT in position with gastric balloon inflated.

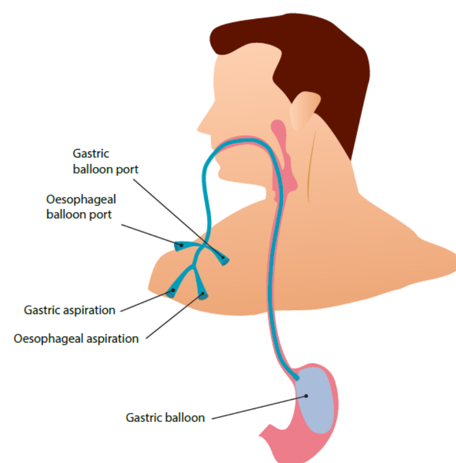

Fig.3 - How to secure the SBT at the mouth

Fig.4 - Correct position of SBT on CXR (picture – radiopedia)