



Endoscopic Variceal Ligation (EVL)/Banding

[Use in conjunction with EGD]

Procedure Guide

General Information

This DVD and its contents are intended to provide you with a tool for orientation to GI procedures, competency reinforcement, and team building within your facility, in terms of this procedure. SGNA recognizes that GI/endoscopy units may utilize different equipment for certain procedures and may define the roles of their team members differently.

Disclaimer

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Description

Under direct visualization through an endoscope, elastic bands are applied to Esophageal or Gastric Varices. When Varices are bleeding, this procedure provides a means of hemorrhage control. When Varices are not bleeding, Ligation Therapy may be performed for therapeutic prevention of future hemorrhage via Variceal Ablation.

Indications

1. Bleeding Esophageal or Gastric Varices.
2. Treatment of Non-bleeding Varices.
3. Treatment of recurrent Bleeding Varices.
4. Ligations may be repeated in 7-14 days and then every two to four weeks until Varices are obliterated. On average, 3-4 banding sessions will be required.

Contraindications

1. Extremely uncooperative patient.
2. Massive hemorrhage that obstructs field of view.
3. Acute ECG changes or respiratory instability.
4. Unstable vital signs.
5. Inability to obtain informed consent from patient or family.

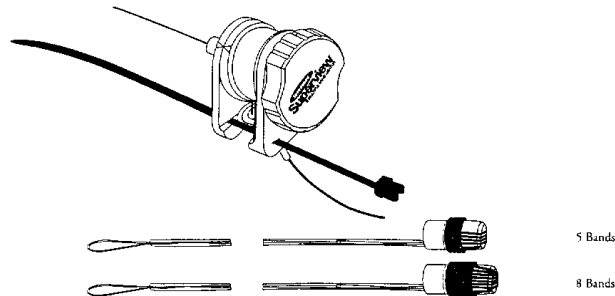
6. Esophageal Stricture, Esophageal Diverticula or suspected Esophageal Performance.
7. When Varices have been eradicated by previous treatment methods.

Pre-Procedure Assessment/Care

1. Verify informed consent specific to Banding. See Standard Considerations.
2. Obtain history of present and previous bleeding episodes, plus prior treatment(s).
3. Obtain patient's status regarding liver function, Coagulopathy, any recent bleeding episodes, ability to swallow solids and/or liquids and symptoms of food sticking in the esophagus. Be prepared to lavage patient's esophagus and stomach using Large Bore Orogastric or Nasogastric Tube if necessary, due to active bleeding.
4. In the acute setting, check to see if blood has been typed and cross matched.
5. For patient's who are acutely bleeding, physician may consider intubation for airway protection while performing the procedure.

Patient Teaching

1. Explain the necessity for a full liquid to soft diet for the first 24-48 hours after the banding procedure if ordered by physician. Provide teaching if the patient or family does not understand.



*Figure 6: Variceal Band Ligator
[illustration courtesy of Boston Scientific Microvvasive]*

Equipment

1. Endoscopic Band Ligation Kit (compatible with the outer diameter of the chosen endoscope). NOTE: Non-latex bands are available.
2. Emergency equipment in case hemorrhage occurs.
3. See Standard Considerations.

Responsibilities During Procedure

1. Assemble Band Ligation Kit when ordered. Some physicians will request a second scope.
2. Document the count of bands successfully applied.
3. Irrigate as requested to help maintain visualization and verify Hemostasis.

Potential Complications

1. Chest pain and Dysphagia
2. Esophageal obstruction due to Edema
3. Esophageal Ulceration and potential for stricture formation when healing occurs
4. Bleeding
5. Perforation
6. Infection
7. Aspiration

Post-Procedure Assessment/Care

1. See Standard Considerations.
2. Elevate the head of the bed to reduce aspiration risk.
3. Avoid Nasogastric Tube or feeding tube placement for 24 hours.
4. Provide outpatients with written discharge instructions to include:
 - a. Diet instructions: full liquid or soft diet for 24-48 hours.
 - b. Return appointment for follow-up exam.
 - c. Instructions for calling physician with signs of any further bleeding orally or rectally, inability to swallow, shortness of breath, increasing chest pain or fever.

References:

1. American Society for Gastrointestinal Endoscopy. (2005). ASGE Guideline: *The Role of Endoscopy in the Management of Variceal Hemorrhage, updated July 2005*. *Gastrointestinal Endoscopy*. 62(5):651-5.
2. Drossman, D.A., Shaheen, N. J., Grimm, I. S. (2005). *Handbook of Gastroenterologic Procedures 4th Edition*. Philadelphia, PA: Lippincott Williams & Wilkins.
3. Harewood, G.C.,; Baron, T.H., Louis, M. & Wong Kee Song. (2006). *Factors Predicting Success of Endoscopic Variceal Ligation for Secondary Prophylaxis of Esophageal Variceal Bleeding*. *Gastroenterol Hepatol*. 21(1):237-241. Blackwell Publishing
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5. Society of Gastroenterology Nurses and Associates, Inc. (2008). *Gastroenterology Nursing: A Core Curriculum. (4th edition)*. Chicago, Illinois: Society of Gastroenterology Nurses and Associates, Inc.