RUBBER BAND LIGATION FOR HEMORRHOIDS (Adult, Peds)

I. Definition

Rubber band ligation is the treatment of choice for bleeding internal hemorrhoids. A rubber band is placed around the hemorrhoid. Seven to ten days after the procedure the hemorrhoid tissue sloughs, with eventual fibrosis and fixation of the tissue.

II. Background Information

A. Setting:

The setting (inpatient vs outpatient) and population (adults vs pediatrics) for the Advanced Health Practitioner (AHP) is determined by the approval of the privileges requested on the AHP Privilege Request Form. If the procedure is being done on a Pediatric patient, make sure Child Life is involved and use age appropriate language and age appropriate developmental needs with care of children, as appropriate to the situation.

B. Supervision:

The necessity of the procedure will be determined by the AHP in verbal collaboration with the attending physician or his/her designee. Direct supervision will not be necessary once competency is determined, as provided for in this procedure. At that time, general or indirect supervision is acceptable.

Designee is defined as another attending physician who works directly with the supervising physician and is authorized to supervise the AHP.

The Advanced Health Practitioner will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

- 1. Patient decompensation or intolerance to the procedure
- 2. Bleeding that is not resolved
- 3. Outcome of the procedure other than expected

C. Indications

- 1. To stop bleeding from internal hemorrhoids.
- 2. To prevent bleeding from grade II and II hemorrhoids
- 3. Failed medical management.

D. Contraindications

- 1. Immuno-compromised patients
- 2. Known blood dyscrasias.
- 3. Anticoagulant medications

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III. Materials

- A. Anoscope
- **B.** Light source
- C. Suction apparatus
- **D.** Alligator forceps
- E. Hemorrhoidal Ligator—either suction ligator or McGivney ligator
- **F.** "0" bands
- G. Lubricant
- **H.** Gloves
- I. Gauze pads

IV. Procedure

A. Pre-treatment evaluation:

Perform physical exam and locate hemorrhoids

B. Set up:

Gather necessary supplies

C. Patient preparation

- 1. Fleets enema prior to procedure
- 2. Obtain written informed consent.

D. Perform the procedure

- **A.** Place the patient in either the knee-chest or left lateral decubitus position.
- **B.** Wash hands and put on gloves.
- C. Perform digital exam and place anoscope (see Anoscopy Standardized Procedure).
- **D.** Select the largest hemorrhoidal complex for treatment.
- **E.** Place the cylindrical drum of the ligator over the hemorrhoidal mass. Use a long handle forceps, held in inverted position, to draw the hemorrhoid through the ligating drum/ or if using suction ligator use the suction to draw the hemorrhoid into ligating drum. Care should be taken to grasp the hemorrhoid 1-2 cm proximal to the dentate line to ensure a painless ligation.
- **F.** Force the ligating drum against the hemorrhoid as traction is applied by means of the forceps to draw it within the cylinder/or suction is used to draw it within the cylinder.
- **G.** Close the handle of the ligator and slip the rubber bands (2) into place around the neck of the hemorrhoid. Do not band too deeply because of the risk of perforation and necrosis. Two bands are placed in case one breaks
- **H.**Generally one hemorrhoid is banded during the first session.
- **I.** Assist patient down from the table.

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E. Post-procedure

- 1. Watch for Complications
 - 1. Pain. If pain is experienced immediately upon ligation, it may be because the placement is too close to the dentate line. Remove the band using a hemostat, and place a new band at a new place or consult physician.
 - 2. Bleeding. Minor bleeding is to be expected 5-7 days after placement of the rubber band when the hemorrhoidal tissue sloughs. Excessive bleeding would require medical evaluation and either re-ligation or surgical intervention.

F. Follow-up treatment

- 1. Instruct the patient to return every three weeks for additional ligations.
- 2. Patient Education
 - a. Educate patient on post-procedure care
 - 1. High fiber diet
 - 2. Fiber supplements
 - 3. Increase fluid intake
 - 4. Sitz baths prn
 - 5. Expect minor bleeding
 - 6. Acetaminophen (if not allergic) for minor pain
 - 7. Expect sense of fullness in rectum which will resolve
 - b. Educate patient on possible complications
 - 1. Delayed hemorrhage, occurs 1-2 weeks post-procedure in about 1% of patients
 - 2. Severe pain
 - 3. External hemorrhoid thrombosis—2-3%. Treatment with sitz baths/stool softeners
 - 4. Ulceration
 - 5. Slippage of ligature
 - 6. Sepsis—signs & symptoms: perianal pain, scrotal swelling, difficulty urinating, fever

V. Documentation

A. Documentation is in the electronic medical record

- 1. Documentation of the pretreatment evaluation and any abnormal physical findings.
- 2. Record the time out, indication for the procedure, procedure, bowel prep, exam findings, hemorrhoidal plexus banded, EBL, the outcome, how the patient tolerated the procedure, medications (drug, dose, route, & time) given, complications, and the plan in the note, as well as any teaching and discharge instructions.

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B. All normal and abnormal findings are reviewed with the supervisory physician.

VI. Competency Assessment

A. Initial competence

- 1. The Advanced Health Practitioner will be instructed on the efficacy and the indications of this therapy and demonstrate understanding of such.
- 2. The Advanced Health Practitioner will demonstrate knowledge of the following:
 - a. Medical indication and contraindications of Rubber Band Ligation.
 - b. Risks and benefits of the procedure
 - c. Related anatomy and physiology
 - d. Consent process (if applicable)
 - e. Steps in performing the procedure
 - f. Documentation of the procedure
 - g. Ability to interpret results and implications in management.
- 3. Advanced Health Practitioner will observe the supervising physician perform each procedure **three** times and perform the procedure **three** times under supervision.
- 4. Supervising physician will document Advanced Health Practitioner's competency prior to performing procedure without supervision.
- 5. The Advanced Health Practitioner will ensure the completion of competency sign off documents and provide a copy for filing in their personnel file and a copy to the medical staff office for their credentialing file.

B. Continued proficiency

- 1. The Advanced Health Practitioner will demonstrate competence by successful completion of the initial competency.
- 2. Each candidate will be initially proctored and signed off by an attending physician. Advanced Health Practitioner must perform this procedure at least **three** times per year. In cases where this minimum is not met, the attending must again sign off the procedure for the Advanced Health Practitioner. The Advanced Health Practitioner will be signed off after demonstrating 100% accuracy in completing the procedure.
- 3. Demonstration of continued proficiency shall be monitored through the annual evaluation.
- 4. A clinical practice outcomes log is to be submitted with each renewal of credentials. It will include the number of procedures performed per year and any adverse outcomes. If an adverse outcome occurred, a copy of the procedure note will be submitted.

VII. RESPONSIBILITY

Questions about this procedure should be directed to the Chief Nursing and Patient Care Services Officer at 353-4380.

STANDARDIZED PROCEDURE RUBBER BAND LIGATION FOR HEMORRHOIDS (Adult, Peds)

VIII. HISTORY OF PROCEDURE

Written December 2006

Revised Sept 2012 by Subcommittee of the Committee for Interdisciplinary Practice

Reviewed Sept 2012 by the Committee on Interdisciplinary Practice

Prior revision Dec 2008

Approved Sept 2012 by the Executive Medical Board and the Governance Advisory Council.

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