

## **I. Policy Guidelines**

1. The following are indications for the procedure:
  - a. Symptomatic hemorrhoids, grades I - III.
  - b. Symptoms include bleeding, swelling, itching, prolapse, and/or "seepage".
  - c. Actively bleeding vessel in the lower rectum or upper anal region.
2. Patients may change into a comfortable and clean hospital gown provided by the facility or covered with a sheet or drape after undressing from the waist down.
3. Patient's complete clinical/medical history and physical examination are reviewed carefully, making certain to check their history of contraindications (pregnancy, portal hypertension, or proctitis) and cautions (anticoagulant use, latex allergy, the use of erectile dysfunction medication, other medical issues). Always note if a patient has a latex allergy - utilize latex-free (blue) bands in these patients.
4. Unless otherwise instructed by the ordering physician, patients are not required to undergo a bowel prep of any kind or need to be "N.P.O" in advance of the treatment, as sedation or anesthesia of any kind is rarely used.
5. Done in a clinic setting or in a procedural room at the discretion of the physician and facility.

## **II. Procedures**

1. The clerk inputs the patient's information into the computer database.
2. The patient is asked to change into a gown or to undress from the waist down with a sheet or drape to cover them. They are placed in the left lateral decubitus position, with both knees drawn up towards their chest.

3. Examiner puts on exam gloves, inspects the perianal region for signs of inflammation and abnormalities, including external hemorrhoids, tags, fissures, fistulae, thromboses, abscesses, and various skin lesions, with findings noted.
4. Examiner performs a digital ano-rectal examination, evaluating for signs of anal fissures, fistulae, anal spasm, abscesses, thrombosed external hemorrhoids, neoplasms, and other mass lesions, with findings noted.
5. If significant anal spasm is noted, then a small quantity of dilute compounded nitroglycerin, diltiazem, or nifedipine ointment may be placed into the anal canal to relieve that spasm, and if significant tenderness is noted, then a quantity of a topical anesthetic may be placed into the anal canal as well. If significant pain is noted, then the procedure will be abandoned with the provider addressing the cause of the pain. Assuming the painful condition has been alleviated, the provider may resume the procedure at a subsequent visit.
6. Anoscopy is performed if indicated, with findings noted. If significant pain is noted, then the procedure will be abandoned with the provider addressing the cause of the pain. Assuming the painful condition has been alleviated, the provider may resume the procedure at a subsequent visit.
7. If indicated, the CRH O'Regan System is opened, and the Ligator is assembled with an appropriate band loaded onto the end of the device. This may be done in advance of the procedure commencing at the examiner's option.
8. Assuming that the patient is a good candidate for the procedure, that appropriate consent was obtained, and was non-tender during the digital ano-rectal exam and anoscopy (if performed), the Ligator is advanced through the anal canal in a "neutral" direction to an appropriate depth. The recommendation is to always pass the Ligator a bit too far and then draw it back into the proper position (generally speaking, this can be marked by the palpable ridge on the outer surface of the "band pusher" residing just inside the anal verge.

9. When the appropriate depth has been reached, the Ligator is directed towards the hemorrhoid to be banded (Right Anterior, Right Posterior, Left Lateral).
10. The "plunger" of the Ligator is pulled back, aspirating some of the hemorrhoid tissue into the barrel of the syringe.
11. The "plunger" is locked in place, and the Ligator is left in place, allowing a bit more tissue to be trapped in the Ligator.
12. The Ligator is rotated 90 - 180 degrees in either direction several times in a "back and forth" method, and the patient is questioned, as they should feel no pain or "pinching" -- only a sense of "pulling", "pressure", or tenesmus.
13. If pain or "pinching" is experienced, then the Ligator is "unlocked" and then placed more deeply into the rectum by repeating #11.
14. If no pain or "pinching" is experienced, the Ligator band is deployed by the examiner.
15. The Ligator is removed and set aside.
16. A digital rectal examination is performed so that the examiner can assess the adequacy of the banding. Ideally, the banded tissue should include at least a small "tuft" of tissue coming through the band, sufficient to ensure that the band will not immediately fall off. The tissue that is banded should be relatively superficial, and the banded "base" should be narrow. If the banded tissue is too deep or the "stalk" is too broad, the risk of complications increases. If an inadequate amount of tissue has been banded, the Ligator is reloaded, and steps 8–15 are repeated. If too much tissue was ligated, or the band was deployed a bit too low in the anal canal, the band and banded tissue are manipulated to "loosen" the band or remove it.

17. The patient should be questioned to see if they are experiencing pain or a "pinching" sensation. If so, then #16 is repeated; otherwise, the patient is encouraged to get dressed and is ready for discharge. Ideally, the patient should be monitored for at least 10 minutes to ensure that no pain or discomfort is noted. If a band needs to be manipulated, that 10-minute observation "clock" is restarted.
18. Prior to discharge, the patient is again questioned by staff to see if they are experiencing pain or a "pinching" sensation, or if they look as if they are uncomfortable. If not, and they only experience a sensation of pressure or mild tenesmus, they are discharged. If they are uncomfortable or complain of "pinching" or pain, they are encouraged to return to the exam room, so the examiner can re-perform #15.
19. A copy of the CRH O'Regan System's "Post Banding Instructions" is given to the patient for their reference, and a follow-up visit is made for that patient at the interval requested by the examiner.
20. A record of the procedure is created, including the findings of the examination, the anoscopy if performed, and the band ligation, including the location of the band placement, along with any other interventions/treatments/medications recommended as a result of the visit.