

## IN THE NEWS

ISSUE: 5/2009 | VOLUME: 60:05

## Which Hemorrhoid Therapy? Expert Reviews Options

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New York—Consider the patient. Consider your skill set. Act accordingly. That's the advice from Tracy Hull, MD, a staff colorectal surgeon at the Cleveland Clinic in Ohio.

"There are so many different approaches to each type of hemorrhoid. Every surgeon needs to have one or two approaches for each type of hemorrhoid in his or her armamentarium. That's absolutely the most important thing," she said in an interview following her presentation at the 2008 Controversies, Problems & Techniques in Surgery Symposium.

The issue is not so much the particular techniques a surgeon uses, as "much as it is that surgeons should stick with what they do and what they do well," she stressed.

In a lecture on her approach to treating hemorrhoids, Dr. Hull said she uses a variety of techniques and relies increasingly less on traditional excision. Excision remains the undisputed gold standard for management of grade IV hemorrhoids, she said, but it should be used only in a small minority of patients. Almost all hemorrhoids can be treated without conventional surgery and with methods that cause less pain, she added.

In her presentation, Dr. Hull, who has authored or co-authored nearly 60 articles on anorectal physiology, showed attendees her treatment algorithm for patients with hemorrhoids. She has six treatment methods in her armamentarium for patients who fail nonsurgical therapy. She regularly performs banding, sclerotherapy, infrared coagulation (IRC2100, Redfield Corp.), stapled anopexy, excision and, with increasing frequency, Doppler ligation (Transanal Hemorrhoidal Dearterialization, THD America).

Dr. Hull uses banding, sclerotherapy and Doppler ligation for patients with first-, second- and third-degree hemorrhoids. She sporadically uses infrared coagulation for patients with first-degree hemorrhoids and stapled anopexy for patients with second- and third-degree hemorrhoids (Table). She does not use some other commonly performed surgical and nonsurgical treatments for hemorrhoids, such as bipolar diathermy (which often requires multiple applications), direct current electrotherapy, cryotherapy and laser therapy.

**Table. Treatment Options For Hemorrhoids**

Grade	Suggested Therapies
I	<b>Banding, sclerotherapy, Doppler ligation, infrared coagulation</b>
II	<b>Banding, sclerotherapy, Doppler ligation, stapled anopexy</b>
III	<b>Banding, sclerotherapy, Doppler ligation, stapled anopexy, excision</b>
IV	<b>Best managed by excision; occasionally stapled anopexy</b>

Dr. Hull's practice reflects a trend across the United States in which physicians are shifting away from hemorrhoid surgery in favor of minimally invasive treatments. Alan L. Goldman, MD, a surgeon and co-medical director at the Center for Colorectal Health (CRH) in Atlanta, relies almost entirely on a nonsurgical method for treating hemorrhoids. He uses a new Canadian device, the CRH-O'Regan ligator, that employs suction instead of metal clamps to grasp tissue (Figure). He is an ardent campaigner for this type of ligation.

"After seeing thousands of hemorrhoid patients and performing over 5,000 bandings using the CRH-O'Regan ligator, I now believe hemorrhoid surgery should only be recommended to patients who have failed banding or in the occasional patient who has nonreducible grade IV hemorrhoids. This should be fewer than 2% of the patients who come see us.

"It is unfortunate that many patients are still being advised they have to have surgery," he added.



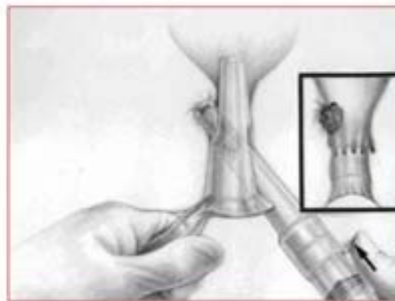
After a rubber band is loaded onto ligator using loading cone, the ligator is advanced to hemorrhoidal tissue at desired angle and proper seal is obtained.



Thumb is placed on "flange" and plunger withdrawn to create full suction. Plunger stops when locking mechanism is engaged.

**Figure. Band placement using the CRH-O'Regan disposable ligator.**

Courtesy of The Center for Colorectal Health ([www.crhcenter.com](http://www.crhcenter.com)) and Dr. Alan Goldman ([agoldman@crhcenter.com](mailto:agoldman@crhcenter.com)).



Band pusher is advanced to discharge band.

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Most experts agree that surgery should be reserved for patients with fourth- or, in some cases, third-grade hemorrhoids or recurrence after banding. "Excision is associated with a lot of expense and increased pain, higher complications and more time off work," said Dr. Hull. "These are issues that we really need to understand."

A 2005 set of practice parameters from the American Society of Colon and Rectal Surgeons notes that excision within 48 to 72 hours of onset of symptoms results in the most rapid relief (Cataldo P et al. *Dis Colon Rectum* 2005; 48: 189-194).

Dr. Hull strongly advocates Doppler ligation, a technique used infrequently in the United States, for less severe hemorrhoids. First described in 1995, Doppler ligation (also known as Doppler guided

noninvasive hemorrhoidal arterial ligation) uses a specially designed proctoscope with a Doppler transducer to detect the arterial inflow of the plexus. The surgeon then ligates the terminal branches of the hemorrhoid artery, causing less postoperative pain than traditional excision. "It does not help every patient, but certainly it works very well for many patients," Dr. Hull said. "It's a very good option for patients who are concerned about pain."

Several European studies done in the last two years have reported minimal pain and higher success rates with Doppler ligation. In the largest study to date, 330 patients in Italy (including 132 with second-degree, 163 with third-degree and 30 with fourth-degree hemorrhoids) were treated with Doppler ligation. At a mean follow-up of 46 months, 92% had total resolution of bleeding and 90% had resolution of prolapse (Dal Monte PP et al. *Tech Coloproctol* 2007; 11:333-338, discussion 338-339). Investigators reported no significant perioperative or postoperative problems with the procedures. Twenty-three patients had postoperative complications, and the mean postoperative pain score was 1.32 on the visual analog scale for pain.

"The technique was effective and safe for all degrees of hemorrhoids because of the excellent results, low complication rate and minor postoperative pain," the authors concluded.

However, Doppler ligation remains controversial. Many American surgeons say the long-term outcomes are not as good as those reported in the European trials. Moreover, many patients require some degree of stapled anopexy in addition to the ligation. The technology is also more expensive than other methods.

In a letter to the journal after publication of the Italian study, Pravin J. Gupta, MD, a general surgeon at Gupta Nursing Home in Nagpur, India, questioned the efficacy of Doppler dearterialization, noting that the authors performed additional suture anopexy.

"Mere ligation of the branches of the superior hemorrhoidal artery does not ensure complete blockage of the blood supply to the hemorrhoid, leaving the possibility of incomplete treatment," he said.

Dr. Hull said she received several letters from surgeons after her presentation who said they have tried ligation and found it does not work. "I know there are people who say they don't find it useful," said Dr. Hull. "I disagree. At the Cleveland Clinic, we've been very aggressive about using it." She acknowledged that there is a learning curve associated with the procedure, estimating that about three to five cases are needed to gain experience.

Dr. Hull also discussed the merits of conventional excision versus stapled anopexy and rubber band ligation. Although the stapled approach offers significant benefits compared with excision in the short-term postoperative period, such as less pain and shorter postoperative symptoms, the long-term outcomes are not as good, she said.

A Cochrane Review published in 2006 found that stapled hemorrhoidopexy is associated with a higher long-term risk for hemorrhoid recurrence and prolapse. Patients who underwent stapled hemorrhoidopexy were more likely to need additional operations than those who received conventional excisional hemorrhoid operations (*Cochrane Database Syst Rev* 2006, Issue 4. Art. No.: CD005393).

A meta-analysis of 15 articles published in the March issue of the *Archives of Surgery* reached the same conclusion (Giordano P et al. 2009; 144:266-272). The authors found that stapled hemorrhoidopexy is safe but has a higher rate of recurrence and need for reoperation. They stated that "it is the patient's choice whether to accept a higher recurrence rate to take advantage of the short-term benefits of stapled hemorrhoidopexy."

Studies also show that rubber band ligation causes much less pain than conventional excision but does not have the same level of long-term success. Dr. Hull recommends rubber band ligation for patients with second-degree hemorrhoids but noted that excision offers "far superior" results in patients with third- or fourth-degree hemorrhoids. "Fewer patients will require re-treatment after excision, and although they have more postoperative pain with excision, patient satisfaction is similar," she said.

All treatment begins with counseling, which surgeons do not provide sufficiently, Dr. Hull said. Patients should be reminded that everyone has hemorrhoids and that the condition requires treatment only if hygiene or pain becomes problematic. All hemorrhoid sufferers should change their diets, slowly increasing their fiber intake to 20 to 35 g daily and increasing their noncaffeine fluid intake.

Dr. Hull repeatedly invoked the need for surgeons to take time to counsel their patients about proper bowel health. Although schools and public health groups often talk about issues like dental hygiene and cardiovascular health, no one educates the public on ways to protect their bowels. "The only place we ever see information on this is at the drugstore," she said.

People should be encouraged to not read on the toilet, limit time on the toilet, drink a lot of noncaffeinated fluids, eat a high-fiber diet and avoid straining, she said.

Approximately 8% of people in the Western world have symptomatic hemorrhoids, although many experts believe that other anorectal problems are frequently misdiagnosed as hemorrhoids.

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