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Management of Hemorrhoids: Mainstay of Treatment Remains Diet Modification and Office-Based Procedures

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Given their prevalence, hemorrhoids are a common but often unvoiced medical problem for patients in the United States. In 2004, an estimated 2 million ambulatory care visits listed hemorrhoids as the primary diagnosis code, and an additional 3.2 million visits listed them as one of the diagnoses, placing hemorrhoids in the top 5 of gastrointestinal system complaints (after gastroesophageal reflux disease, ventral hernia, functional disorder, and diverticular disease). Furthermore, patients filled 2 million prescriptions for the treatment of hemorrhoids in addition to the over-the-counter medications that many use for self-treatment. (1)

In 2010, the Standards Committee of the American Society of Colon and Rectal Surgeons (ASCRS) published Practice Parameters for the Management of Hemorrhoids, (2) which updated the ASCRS 2005 guideline on this topic. (3) Overall, the recommendations in the 2010 practice parameter remain similar to those issued in 2005, with two major differences. First, the 2010 update uses the GRADE system (Grading of Recommendations, Assessment, Development and Evaluation) to rate the level of evidence. Second, the new version covers new surgical techniques including LigaSure hemorrhoidectomy and Doppler-guided ligation.

The 2010 practice parameters provide recommendations for evaluating patients with hemorrhoids, for identifying patients who require endoscopic evaluation of the colon, and for treatment options such as diet modification, office-based procedures, and surgical hemorrhoidectomy. In general, the treatment options vary by hemorrhoid severity or grade. For example, office-based procedures are reserved for patients with grades I, II, and III hemorrhoids and who have failed medical management. Surgical treatment of hemorrhoid disease is customarily offered for patients whose disease does not respond to or who are not able to tolerate office-based procedures, as well as for patients with large external hemorrhoids or grade III/IV combined internal/external hemorrhoids.

	Medical Treatment	Office-Based Procedures			Surgical Hemorrhoidectomy		
Internal Hemorrhoid Grade	Diet Modification	Rubber Band Ligation	Sclero-Therapy	Infrared Coagulation	Surgical Excision	Stapled Hemorrhoidopexy	Doppler Guided Ligation
I: No prolapse	X	X	X	X			

	Medical Treatment	Office-Based Procedures			Surgical Hemorrhoidectomy		
Internal Hemorrhoid Grade	Diet Modification	Rubber Band Ligation	Sclero-Therapy	Infrared Coagulation	Surgical Excision	Stapled Hemorrhoidopexy	Doppler Guided Ligation
II: Prolapse, spontaneous reduction	X	X	X	X			X
III: Prolapse, manual reduction	X	X	X		X	X	X
IV: Chronically prolapsed					X	X	

Source: Table created by Dr. McGory Russell for this Expert Commentary.

Among the office-based procedures, rubber band ligation can be performed via anoscopy or with flexible endoscopes. However, it is worth noting that a 2010 Standards of Practice paper from the American Society of Gastrointestinal Endoscopy reports higher costs, as well as patient discomfort with the use of flexible endoscopes. (4)

excision was developed in the United Kingdom by Milligan and Morgan, who excised the three major hemorrhoid bundles and left the incisions open; Ferguson later modified this with primary closure of the incisions. (5) A 2009 Cochrane review specifically evaluating use of the LigaSure (bipolar energy device) to perform surgical excision versus conventional techniques demonstrated less postoperative pain for patients and a shorter time to perform the procedure. (6) Although the complication rate between LigaSure and conventional hemorrhoidectomy is comparable, further research is needed to evaluate the risk of long-term hemorrhoid recurrence after LigaSure hemorrhoidectomy. The major benefits of newer techniques like stapled hemorrhoidopexy or Doppler-guided ligation, when compared to surgical excision, are less pain and faster recovery. However, stapled hemorrhoidopexy has a higher rate of recurrence (when compared to surgical excision), and more data is needed on long-term outcomes after Doppler-guided ligation.

It is important to include the patient's perspective regarding severity of symptoms in order to accurately determine the risk/benefit ratio in regard to issues like postoperative pain and bleeding risk. However, pain management after hemorrhoid surgery and how to manage perioperative anticoagulant medications for patients undergoing hemorrhoid surgery are not addressed by the current ASCRS practice parameters. The PROSPECT (PROcedure–SPECific postoperative pain managemenT) working group evaluated 65 studies in a systematic review on pain management after hemorrhoid surgery. The PROSPECT group recommended use of a local anesthetic (either alone or as an adjunct to regional or general anesthesia) in addition to use of non-opioid pain medications (like non-steroidal anti-inflammatory drugs, cyclo-oxygenase 2 inhibitors, or acetaminophen) when possible to minimize problems with complications. Physicians can add opioids for pain control if non-opioid medications prove inadequate. (7) Unfortunately, there are no standard guidelines for perioperative management of anticoagulation medications for patients undergoing hemorrhoid surgery. Bleeding is a known complication after both office-based procedures and surgical hemorrhoidectomy. Pigot et al. evaluated the rates of postoperative bleeding after anorectal procedures and found a rate of 7.9% for patients undergoing hemorrhoidopexy and a 6.2% rate for patients undergoing surgical excision. (8) The risk increased significantly for patients taking clopidogrel or oral anticoagulants, while aspirin did not appear to affect bleeding risk.

Overall, the ASCRS updated practice parameters for the management of hemorrhoids provides a concise summary of treatment options. The primary impetus behind development of new surgical techniques for hemorrhoidectomy is that traditional surgical excision causes patients significant postoperative pain and disability. While newer techniques like hemorrhoidopexy, LigaSure hemorrhoidectomy, and Doppler-guided ligation appear to

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Potential Conflicts of Interest

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