

Introducing Comprehensive Non-Surgical Anorectal Care to the Gastroenterology Fellowship Training Curriculum: The University of South Alabama Experience



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INTRODUCTION

Anorectal disorders are common and are responsible for frequent complaints from patients presenting to gastroenterologists. These patients, and often their referring physicians, expect that gastroenterologists, who typically would be performing an examination of the area, would also be able to provide comprehensive care of any non-surgical anorectal issues. Unfortunately, gastroenterologists have deferred the care of anorectal issues to the surgical specialties. Many gastroenterology fellowship training programs do not include the care of anorectal disorders within their core training curricula. These disorders and their treatment are not mentioned specifically within the most recent edition of “The Gastroenterology Core Curriculum” (1), but a new section on care of the patient with anorectal disorders should be added.

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At the University of South Alabama (USA), the division of gastroenterology feels that this is truly a missed opportunity. The incorporation of these services into a gastroenterologist’s practice would benefit our patients by providing them cost effective, efficient, high quality care, and may also spare patients surgical procedures. This would also benefit our practice by attracting more patients, most of whom would require other routine care such as flexible sigmoidoscopy or colonoscopy. Fellows would be able to take advantage of having this additional knowledge base and skill set, to enhance patient care. They will gain a competitive edge in the medical marketplace as they prepare to enter private practice.

For the USA gastroenterology fellowship program, we felt that these non-surgical anorectal issues should be the domain of the gastroenterologist. In January of 2009, we initiated a program that incorporated a series of didactic presentations for our gastroenterology fellows, the internal medicine residents, and medical students in a “Grand Rounds” format. We also

began a series of hands-on training sessions for our fellows, making them comfortable with the evaluation and treatment of a host of issues including hemorrhoids, fissures, and other common perianal ailments.

There are a number of technologies available for the non-surgical treatment of hemorrhoids, including Infrared Coagulation (IRC—Redfield Corporation, Rochelle Park, NJ), first described in 1979 by Neiger (2), sclerotherapy, bipolar diathermy, direct current electrotherapy, “heater probe” cautery, and rubber band ligation (RBL) utilizing one of a number of devices for application of the band (3). We chose the rubber band ligation technique utilizing the CRH O’Regan System™ (CRH Medical, CA), a disposable, single-use suction ligator in our program for a number of reasons. RBL seems to be the most versatile of these technologies, as it is capable of treating patients with all grades of hemorrhoids, and the CRH O’Regan System provides the additional advantage of allowing for a rapid, efficient, painless administration of the band in an office or ambulatory care center environment, without the need for patient preparation, sedation, wall suction or other special equipment (4).

The procedure may be performed with a paired, slotted anoscope, but can also be performed using a blind “touch” technique (Figure 1, courtesy Dr. Iain Cleator), which is preferred by our program. The procedure has been shown to be both safe and effective, as Dr. Cleator reported on his results on 1852 patients in 2005, demonstrating that the technique was effective 99% of the time with less than 1% complications, and only a 5% recurrence rate at 2 years (5). He reported on an even larger sample of patients in 2010, following 6690 patients for a mean of 42 months, and found a similar safety profile as well as a long term recurrence

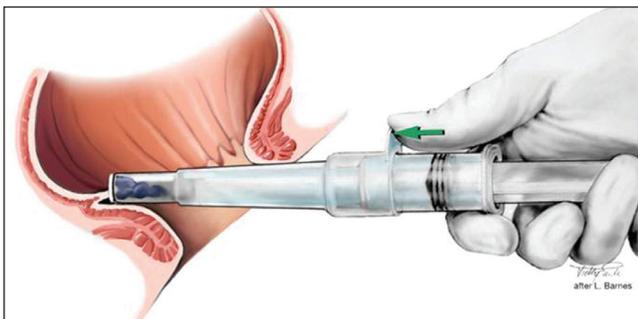


Figure 1.



Figure 2.



Figure 3.

rate of only 13% (6). We follow Dr. Cleator’s protocol of banding a single column of hemorrhoids at a setting in order to minimize complications, and Figures 2 and 3 (compliments of Dr. Neal Osborn) illustrate a successful treatment of a symptomatic hemorrhoid patient.

The development of this program involved the use of our existing staff and divisional facilities available to us at USA. The training program was facilitated by the use of outside speakers as well as clinicians experienced in the treatment of hemorrhoids, fissures, and other anorectal disorders. CRH Medical provided their medical director, a board-certified general surgeon, with extensive experience utilizing their device, for the presentation. CRH provided some devices for training but no other monetary grant or consideration was provided. This initial outsourcing of teaching resources allowed us to immediately implement this new program as we

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develop the expertise that will allow us to sustain this initiative into the future. CRH Medical continues to provide lectures and proctorship, helping to introduce these topics to new classes of fellows at USA.

THE OPPORTUNITY

Anorectal complaints are truly ubiquitous within western civilization. In 1990, Johanson reported the prevalence of symptomatic hemorrhoids, characterized by itching, bleeding, swelling, prolapse, and pain, as affecting 10 million people in the United States (7). Cataldo stated the prevalence rate in the United States as being as high as 4.4% (3). Other data from the National Center for Health Statistics states that the number of patients suffering from symptomatic hemorrhoids may be as high as 23 million (8,9). The exact number of symptomatic people is difficult to obtain, as many of these people never seek medical attention, or confuse other anorectal issues as being due to hemorrhoids (9,10). These other issues include anal fissures, fecal incontinence, proctalgia fugax, pelvic floor dyssynergia, pruritus ani and solitary rectal ulcer syndrome (11).

A working knowledge of each of these entities should be considered essential to the practicing gastroenterologist for a proper evaluation with endoscopy and other diagnostic maneuvers, to allow for the appropriate treatment of these patients' problems. Patients are usually referred to us for evaluation and treatment from their primary care providers, and we now have additional tools at our disposal to provide appropriate care for anorectal issues.

OUR PROGRAM

The USA College of Medicine is a 4-year fully accredited medical school, with approximately 290 medical students. The department of medicine has a residency program with approximately 50 internal medicine interns and residents and the division of gastroenterology has 6 fellows, spread through three years of fellowship training. The program utilizes the USA Medical Center, a 346-bed acute care hospital that serves as the primary teaching hospital for USA, as well as the Infirmary West hospital, which is a 124-bed not-for-profit hospital containing the "Digestive Health Center," and the USA Children's and Women's

Hospital, housing 152 beds. Fellows also rotate at the in . These four facilities afford our residents and fellows a high volume of patients from all demographic groups with a wide variety of clinical issues.

USA recognized the opportunity discussed above, and developed a multi-faceted approach to the care of anorectal disorders to the division of gastroenterology. Working in concert with the medical staff of CRH, a series of lectures and Grand Rounds presentations were organized for the department of medicine and the division of gastroenterology at USA, and then a lecture presentation was given to the "Gulf Coast Gut Club" in order to help introduce these topics to the gastroenterology community at large. These presentations were well received, and it is our belief that this program will help those in primary care to properly diagnose and initiate treatment for these disorders in their clinics, as well as to help establish our department as a referral destination for more complex cases requiring additional diagnostic or therapeutic measures.

Topics included anorectal anatomy, physiology and pathophysiology, with great attention paid to the workings of the pelvic floor, understanding that spastic disorders and dyssynergic defecation play a role in the development of many of these anorectal issues (10).

The clinical aspects included hemorrhoids, fissures, abscess, fistula, proctalgia fugax, pruritus ani, fecal incontinence, and some of the other lesions encountered in the anorectum. We found that this complemented information associated with the inflammatory and neoplastic conditions that are commonly diagnosed and treated in the anorectum. We have found that the students, residents and fellows found the information clinically valuable, as these topics are usually not well addressed within most other training programs.

While we strive to include this material for all of our students, interns and residents, we reserve the more advanced topics, including the non-surgical care of hemorrhoids to our fellows. We also introduce the technique of anoscopy to them, and describe the limitations of a flexible exam of the anorectum, where insufflation and stretching of the rectal wall often masks the presence or severity of many patients' internal hemorrhoids (12).

The hands-on sessions for the fellows included treating a series of pre-selected patients, giving each an opportunity to perform several ligations, and then

allowing the fellows to observe the others' procedures as well. The procedure included the application of a band utilizing the CRH device, which typically takes less than a minute to perform, and then performing a post-ligation rectal exam to assure the adequacy and safety of the ligation. This sharing of patients between the fellows allowed each to perform a number of these post-banding exams, assuring that each fellow was comfortable with the procedure. One of these sessions was held in our hospital gastroenterology lab and two others in our clinic area. The program involved two hours of didactic presentations, and three to four hours of hands-on time, and this was supplemented with two additional sessions in the first 12 months. These procedures have a very rapid "learning curve" (13), and the fellows had a good feel for the procedure after performing it four or five times, and having an opportunity to examine other patients after they have been banded.

RESULTS OF THESE EFFORTS

The initial feedback has been very positive. The gastroenterology faculty and fellows value the ability to treat patients with these clinical issues, and the patients are satisfied with their care. It is clear that patients with issues of the anorectum are often put off, or told to live with it. While the vast majority of these conditions are not life threatening, they affect a patient's quality of life. Patients often present to our clinics frustrated by the fact that many physicians ignore these problems.

We have also had one graduating class of fellows since our initial implementation of this program, and we have found that these skills are being retained and utilized in their subsequent practices.

FUTURE PLANS

The USA gastroenterology fellowship initial experience with this comprehensive anorectal care program has been very positive, from the perspective of the gastroenterology faculty and fellows as well as from the patients. Most importantly, our ability to provide optimal care for our patients has been enhanced. Our aim is to continue to integrate educational material and procedural instruction into our program, strengthening and broadening the experience and expertise of our fellows in this treatment area.

We also plan to reach out to others in the USA department of medicine in order to help them identify and care for their patients' anorectal issues, as well as to further reinforce the care that our division is able to offer their patients. Firming up these referral patterns within our institution will help us to more efficiently and effectively care for these patients, as well as to help sustain the program and the future experience of our fellows and faculty. The opportunity to have a similar type of outreach to other departments that may encounter these issues (OB-GYN, Emergency Medicine and Family Practice) should further streamline the care of our patients, and help augment our referral patterns with them as well. We plan to continue to utilize the resources offered by CRH in order to supplement the fellowship training curriculum. We have found great value in this program, and strongly recommend that other fellowship training programs consider introducing these topics and procedures. ■

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