Artículo:

Proctology in the Family Practice
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INTRODUCTION

Anorectal disorders include a diverse group of pathologic disorders that generates significant patient discomfort and disability. Though these are frequently encountered in general medical practice, these often receive casual attention and temporary relief.

Diseases of the rectum and anus are common phenomena. Its prevalence in the general population is probably much higher than that seen in clinical practice, since most patients with symptoms referable to the anorectum do not seek medical attention.

As a doctor of first contact, the family practitioners frequently face with difficult questions concerning the optimum management of ano-rectal symptoms. While the examination and diagnosis of certain ano-rectal disorders could be challenging, but it is a matter of concern that the physical examination of the ano-rectum is often inadequately performed in general clinical practice.

The diagnosis and management of hemorrhoids, fissures, and pruritus ani on rough estimates, accounts for more than 81% of the complaints centering around this part of human anatomy.

This brief treatise attempts to offer a safe and practical approach to the management of a variety of the ano-rectal diseases.

Brief description of the anal canal. The anus is the outlet to the gastrointestinal tract, and the rectum...
is the lower 10 to 15 cm of the large intestine. The anal canal starts at the ano-rectal junction and ends at the anal verge. The average length of the anal canal is 4 cm. The midpoint of the anal canal is called the **dentate line**. This dentate or pectinate line divides the squamous epithelium from the mucosal or columnar epithelium. Four to eight anal glands drain into the crypts of Morgagni at the level of the dentate line. Most rectal abscesses and fistulae originate in these glands. The dentate line also delineates the area where sensory fibers end. Above the dentate line, the rectum is supplied by stretch nerve fibers and not the pain nerve fibers. This allows many surgical procedures to be performed without anesthesia above the dentate line. Conversely, below the dentate line, there is extreme sensitivity, and the perianal area is one of the most sensitive areas of the body. The evacuation of bowel contents depends on action by the muscles of both the involuntary internal sphincter and the voluntary external sphincter. Symptomatology of the ano-rectal lesions.

The presentations of symptoms in patients with ano-rectal pathologies are mostly typical, but they may be misleading due to the patient’s understatement or underplaying of symptoms.

The common symptoms denoting ano-rectal pathology are- [In the order of frequency].

**Symptomatology of ano-rectal pathologies**

- Anal pain
- Bleeding per rectum
- Pus discharge from and around anus
- Prolapse
- Anal pruritus
- Presence of swelling or lump in or around anus
- Passage of mucus per rectum
- Constipation or fecal obstruction
- Frequency of stool
- Difficulty in passing stool
- Incontinence to flatus or feces

A systematic approach to the patient with ano-rectal complaints allows for an accurate and efficient diagnosis of the underlying problem. The process can be divided into the interview, the examination, and conveyance of information. Throughout this process, the patient must be reassured and made as comfortable as possible.

The key to diagnosis remains the patient history, with confirmation by visual inspection and anoscopy. Expensive workups are usually not required. Based on the symptoms and possible differential diagnosis, further investigation is necessary. The common ano-rectal lesions encountered in the family practice are- [In order of frequency].

### Common ano-rectal lesions

**Commonest**

- Hemorrhoids [Internal or external]
- Anal fissures [Acute or chronic]
- Anal fistula [Low or high]
- Abscesses [Perianal, Ischio-rectal, Submucus]
- Polyps [Adenomatous, fibrous anal, juvenile]
- Rectal Prolapse [Mucosal or complete]
- Anal skin tags or Sentinel pile
- Ano-rectal sepsis [Hyderadenitis suppuntiva, AIDS, Syphilis]

**Less Common**

- Sacro-coccygeal pilonidal sinus disease
- Neoplasmi [Benign or Malignant]
- Condylomas
- Connective tissues masses like papiloma, fibroma, and lipoma
- Antibioma [Organized abscess]
- Inflammatory conditions [Proctitis, anal cryptitis and papillitis]
- Inflammatory bowel disorders [Ulcerative colitis and Crohn’s disease]
- Hypertrophied anal papillae

**Uncommon**

- Strictures of anal canal or rectum
- Solitary rectal ulcer
- Incontinence [Flatus or feces]

**MATERIAL AND METHODS**

**Anal pain.** This is the commonest complaint among the general population.

The pathologies responsible for causing anal pain are- [In the order of frequency].

**Causes of anal pain**

- Anal fissure [Acute or chronic]
- Perianal hematoma
- Anal sepsis
- Prolapsed and thrombosed hemorrhoids
- Anal fistula
- Anal malignancy
- Thrombosis in internal hemorrhoids [Acute attack of piles]
- Functional disorders [Proctalgia fugax and Levator ani syndrome]
- Foreign bodies
Pain during bowel movements that is described as “similar to one caused by a cut with sharp glass” usually indicates a fissure. This pain is most intense during the bowel movement and usually persists for an hour or so thereafter. It may then either abate until the next bowel movement or continue, usually at a lesser degree. Aching after a bowel movement can occur with internal hemorrhoids. The acute onset of pain with a palpable mass is usually due to a thrombosed external hemorrhoid [Perianal hematoma]. This intense pain typically lasts for 48 to 72 hours and then subsides spontaneously but in effect, may take several days to disappear. While rectal cancer seldom causes pain unless it is extremely advanced, anal cancers more commonly cause pain after invasion of the sphincter muscle. Anorectal pain that begins gradually and becomes excruciating over a few days may indicate infection. A localized area with tenderness could signal an abscess. Anal pain accompanied by fever and inability to pass urine signals perineal sepsis and is an emergency.

**Bleeding per rectum.** There is no overemphasis when it is said that all cases of rectal bleeding ought to be evaluated and the cause identified. It is because significant pathologic conditions such as cancers and polyps can bleed intermittently. A study of patients presenting to family physicians concluded that hemorrhoids, fissures, and polyps are the most common causes of rectal bleeding. If one of these common conditions could overtly be identified as to its probable site and the cause of bleeding, then colonoscopy and other investigations may not be necessary.

Indications for further investigation include older age, significant family history of bowel disease or a suspected malignancy. Indeed, non-resolution of the bleeding despite treatment of the condition initially presumed to be the source of bleeding should arouse suspicion leading to an evaluation of the condition further and more thoroughly. Total colon examination is mandated if rectal bleeding is accompanied by systemic symptoms, or there is a clinical suspicion of proximal disease, or when the cause of rectal bleeding could not readily be established. Causes of bright red rectal bleeding are- [In the order of frequency].

**Causes of bleeding per rectum**

- Hemorrhoids
- Anal fissures
- Polyps
- Malignancy
- Inflammatory bowel disease
- Rectal prolapse
- Anal fistula
- Solitary rectal ulcer
- Arterio-venous malformations

**Pus discharge.** Discharge of pus from or around the anus is another disturbing symptom. The nature and frequency of this discharge is variable. At times, it is profuse, persistent, and painful. While in other cases, there would be complaints of a scanty discharge keeping the area “soiled or wet”. The commonest cause of pus formation is anal and perianal suppurative, leading to formation of a fistula or a burst abscess.

Little other pathology may develop secondary infection due to invasion by pus forming organism to give rise to discharge of pus in addition to their typical symptoms.

**Causes of pus discharge**

- Anal fistula
- Anal fissure with suppuration or fistula formation
- Submucus or perianal antibioma [Aseptic abscess]
- Proctitis
- Inflammatory bowel disease
- Anal malignancy
- Solitary rectal ulcer
- Suppuration in thrombosed hemorrhoids

A thorough evaluation of the patient is necessary to establish the actual cause of pus discharge. While abscesses and fistulae are obvious on inspection and palpation, other lesions may need a multifaceted approach to reach to the source of pus discharge. Sigmoidoscopy, examination of the discharge, biopsy, and endoanal ultrasonography may be required in this maneuver.

**Pruritus ani (Anal Itch).** Pruritus ani is an extremely common and annoying symptom, which is associated with a wide range of mechanical, dermatological, infectious, systemic, and other conditions. Regardless of the etiology, the itch/scratch cycle becomes self-propagating and results in chronic pathologic changes that persist even if the initiating factor is removed.

Many patients believe pruritus ani is caused by poor hygiene and are overzealous in their attempt to clean the perianal area. Excessive cleaning, and particularly the use of brushes and caustic soaps, aggravate the sensitive tissues and exacerbate the condition. The perianal area can be highly sensitive to perfumes, soaps, clothes, fabrics, dietary intake, and superficial trauma. Any pruritic lesion that persists after adequate treatment should necessarily be subjected to biopsy to arrive at an appropriate opinion.

**Causes of anal pruritus**

- Discharge and soiling [Anal fistula, anal fissure]
- Allergy [Drugs, clothes, local applications]
- Anal skin tags, anal papilloma
• Mucus leak from hemorrhoids or prolapse
• Various skin conditions [Dermatitis, Psoriasis, Lichen, Scabies]
• Worm infestation
• Condyloma [Anal warts]
• Postoperative conditions
• Anal incontinence

Prolapse from the anus. Protrusion of “something” from the anus is a symptom, which denotes various pathological conditions of the ano-rectum. The prolapse may occur during defecation to be reduced spontaneously or manually. In other cases, there could complaints of a permanently prolapsed mass outside the anus.

While prolapses, which get reduced on their own are usually painless, yet in a few cases these may cause pain while getting reduced. Permanently prolapsed masses generally are painful, are a source of discomfort in the form of soiling, pruritus, and may cause a sort of dragging sensation in the anal region.

Few common lesions to cause prolapse are- [In the order of frequency].

Causes of prolapse from the anus

• Hemorrhoids
• Rectal prolapse [Mucosal or complete]
• Polyps [Rectal, fibrous anal polyp]
• Neoplasm [Melanoma, Angioma, Papiloma]
• Intussusception

Swelling or Lump around anus. Anal or perineal “lumps” may be due to a wide range of conditions. Full assessment, including a detailed history, inspection, palpation, anoscopy and, in some cases, biopsy, sigmoidoscopy or colonoscopy, may be needed to define the exact nature of these lesions. A palpable mass discovered in the anal area may land the patient in an imaginary belief of it being cancer while other may assume the mass to be a hemorrhoid to be ignored.

Lumps or masses of a recent origin or those that are painful have an infective or hemorrhagic etiology like an abscess, a perianal hematoma, or thrombosis and should call for a thorough examination.

Lump or mass in or around anus

Painful masses

Abscess * Perianal hematoma * Anal fistula
Antibioma [Aseptic abscess, organized abscess]

Thrombosed hemorrhoids * Inflamed sentinel pile of anal fissure
Malignancy of anal canal

Painless masses

* External anal tags * Condyloma acuminata
Venereal warts [Molluscum Contagiosum] * Fibrous anal polyp
Papilloma * Neoplasms [Leiomyoma, angiomyxoma]

Constipation. The term constipation can have a variety of meanings. Patients may use the term to indicate the lack of an urge to defecate, a decreased frequency of bowel movements, difficulty in passing hard scybalo-us stools, the feeling of an incomplete evacuation or prolonged straining at toilet. In general, a condition is regarded as constipation when a person encounters fewer than three bowel movements per week while continuing a daily consumption of at least 19 g of fiber. This condition could be due to multiple reasons. It is imperative that the clinician rule out possibility of obstructing lesions or other painful anal lesions before undertaking the treatment of constipation.

In few cases, the situation may take a more serious turn in the form of fecal impaction or fecolith obstruction. This is an acute condition and needs an urgent attention.

The common causes of constipation are.

Causes of constipation

• Habitual or dietary
• Senile
• Drug induced
• Fecal impaction
• Functional disturbances
• Systemic disease
• Neurological conditions
• Lazy colon [Colonic inertia]

Passage of mucus. Passing mucus or ‘slime’ from the anus is a disturbing symptom, which compels the patients to consult their family physicians. Mucus discharge mostly denotes a pathology causing irritation of the colon, but it may be due to few anal conditions also. The mucus may be a part of the stool passed or it may occasionally pass in isolation per rectum. The consistency may vary and at times, it may pass mixed with blood.

An extensive evaluation is necessary to rule out any specific pathology behind this symptom. This includes colonoscopy, microscopic and cytological examination of the mucus.
Causes of mucus discharge per rectum

- Inflammatory bowel disease
- Rectal prolapse
- Mucus colitis
- Hemorrhoids
- Solitary rectal ulcer
- Drugs containing liquid paraffin

Incontinence. This is the inadvertent passage of flatus, liquid or solid stool. Fecal incontinence can seriously impair or restrict normal activities to make one’s life miserable.

Normal continence depends on many interrelated factors, including stool volume and consistency, colonic function, rectal compliance, rectal sensation and sphincter function. The incontinence may be partial or complete. It is, however, important to rule out fecal impaction with overflow before seeking a pathophysiological cause for uncontrolled passage of liquid stool.

Causes of incontinence

- Debilitating conditions, in elderly, mentally ill and parous women
- Obstetrical injury
- Neurological disorders
- Birth injury
- Neuropathy like in diabetes
- Postoperative
- Rectal prolapse
- Diarrhea conditions
- Radiation injury to rectum
- Overflow incontinence with fecal impaction

Anal stenosis or stricture. The patients complain of difficulty in passing stool or may feel that the “opening” has gone small. Most commonly, stricture or stenosis of the anal outlet occur secondary to interference with the anal canal either by surgery or by underlying pathologies.
**Causes of anal stenosis or stricture**

- Surgery
- Radiation
- Neoplasm
- Sepsis
- Inflammatory bowel disease
- Anal fissure
- Trauma [iatrogenic or accidental]

**Presentation of ano-rectal pathologies at a glance.** As discussed earlier, the ano-rectal lesions can present in variety of forms. The demographic of patients and presentation of symptoms is shown in figures 1, 2 and 3.

**Investigating a case of ano-rectal lesion.** The patient’s history, inspection, and palpation of the ano-rectum remain the basic, essential features of diagnosis. A successful interaction with the patient leads to a diagnosis and a treatment plan that is acceptable to both the physician and the patient.

Anoscopy [proctoscopy] remains the mainstay in detection of anal pathologies. When a more proximal lesion is suspected, a sigmoidoscopy or colonoscopy along with biopsy is needed. Anorectal physiology and endoanal-ultra sonography are also regarded as essential investigative techniques in a colorectal laboratory. Anal manometry, defecography are also regarded as essential investigative tools for the colorectal workup.

Fistulograms, magnetic resonance imaging, and tomographic scanning are few other investigations to mention. Treatment of ano-rectal diseases.

Family physicians could manage most of the common ano-rectal disorders they see in office practice. Most cases could be treated by conservative medical treatment (e.g., dietary changes, sitz baths, analgesics, antibiotics, stool softeners, hemorrhoidal creams and suppositories) or nonsurgical procedures.

In recent years, great interest has been generated in the field of proctology. Availability of new diagnostic and operating tools and a refinement in technique, coupled with new therapeutic modalities has contributed in achieving interesting research results in providing relief to patients needing proctological intervention.

An attempt has been made in the following paragraphs to describe in brief the therapeutic modalities of common ano-rectal disorders.

**TREATMENTS**

**Anal fissures**

Acute anal fissures are superficial and are usually multiple. They respond well to conservative therapies like warm sitz bath, application of various ‘hemorrhoidal’ creams, analgesics, and dietary modifications. Proper anal hygiene and correction of chronic constipation or diarrhea are essential to prevent recurrence of fissures.

Chronic anal fissures are mostly found on the posterior or anterior midline. They are often associated with pathologies like sentinel tags, anal papillae, fibrous polyps or hemorrhoids. Therapies useful for acute fissures could only provide a short-term relief in such chronic forms. They in addition, do need some sort of internal sphincter manipulation. Such manipulation could be either surgical or non-surgical.

Despite the initial success with these pharmacological agents in the treatment of patients with chronic anal fissures, a growing concern is developing about their use. Increase in the incidences of adverse effect and

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**Few of the non-surgical treatment modalities are summarized below**

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Cost factor</th>
<th>Cure rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inj Botox</td>
<td>Easy office procedure, single injection</td>
<td>Invasive, toxicity, infection</td>
<td>Costly</td>
<td>79%</td>
</tr>
<tr>
<td>Oral nifedipine</td>
<td>Oral or topical administration, faster healing of fissure</td>
<td>Short duration of action, side effects like headache</td>
<td>Economical</td>
<td>90-95%</td>
</tr>
<tr>
<td>Local application of vasodilators [Nitroglycerine]</td>
<td>Easy application, Short duration of treatment, high healing rates</td>
<td>Headache in 20-100% patients. High recurrence rate</td>
<td>Economical</td>
<td>60-90%</td>
</tr>
<tr>
<td>Alpha-1 adrenoceptor blockers</td>
<td>Once daily dose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical cauterization</td>
<td>Easy application, faster healing</td>
<td></td>
<td>Economical</td>
<td>70-80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Economical</td>
<td>60-70%</td>
</tr>
</tbody>
</table>
The hemorrhoids are graded based on findings by the following clinical examination.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Symptoms</th>
<th>Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Bleeding and discomfort</td>
<td>Hemorrhoids visible on anoscopy, which may protrude during straining</td>
</tr>
<tr>
<td>II</td>
<td>Bleeding, discomfort, discharge/pruritus</td>
<td>Prolapse visible at anal verge during straining with spontaneous return to normalcy when straining ends</td>
</tr>
<tr>
<td>III</td>
<td>Bleeding, discomfort, discharge/pruritus</td>
<td>Prolapse requiring manual replacement</td>
</tr>
<tr>
<td>IV</td>
<td>Bleeding, discomfort, discharge/pruritus and staining of undergarments</td>
<td>Irreducible prolapse</td>
</tr>
</tbody>
</table>

The following table elaborates the various treatment options for different grades of hemorrhoids

<table>
<thead>
<tr>
<th>Hemorrhoid grade</th>
<th>Treatment options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade I</td>
<td>Sclerotherapy</td>
</tr>
<tr>
<td></td>
<td>Infra red photocoagulation</td>
</tr>
<tr>
<td></td>
<td>Bicap</td>
</tr>
<tr>
<td></td>
<td>Doppler guided hemorrhoidal artery ligation [DGHAL]</td>
</tr>
<tr>
<td></td>
<td>Radiofrequency ablation</td>
</tr>
<tr>
<td>Grade II</td>
<td>Rubber band ligation</td>
</tr>
<tr>
<td></td>
<td>Infra red photocoagulation</td>
</tr>
<tr>
<td></td>
<td>Heater probe</td>
</tr>
<tr>
<td></td>
<td>Ultroid [Direct current probe]</td>
</tr>
<tr>
<td></td>
<td>DGHAL</td>
</tr>
<tr>
<td></td>
<td>Radiofrequency ablation</td>
</tr>
<tr>
<td>Grade III</td>
<td>Surgery [Coventional, diathermy, harmonic scalpel, laser]</td>
</tr>
<tr>
<td></td>
<td>Stapler hemorrhoidopexy [PPH]</td>
</tr>
<tr>
<td>Grade IV</td>
<td>Surgery</td>
</tr>
<tr>
<td></td>
<td>Stapler hemorrhoidopexy [PPH]</td>
</tr>
</tbody>
</table>

Medical therapy of hemorrhoids. Although, not constituting an etiological treatment of the disease, conservative treatment do have a role in relieving the symptoms of hemorrhoids and associated complaints as well.

Medical treatment of hemorrhoids

- Control of constipation using bran, mucilage, lactulose or bulk forming laxatives
- Increasing daily intake of fibers
- Avoidance of colonic stimulants like coffee, tea and spices
- Use of flavonoid derivatives [Diosmin] and Calcium Dobisilate
- Use of hemorrhoidal creams, ointments and suppositories
- Use of anti-pruritics
- Adequate local hygiene

Treatment of ano-rectal sepsis. The anorectal area could be involved in several infectious and inflammat-
tory processes. Abscesses often have their origin in an infection in the anal glands. The suppurative process then tracks through the various planes in the anorectal region. The infection can present at the anal verge as a perianal abscess. These abscesses could easily be drained in the office under local anesthesia.

Bacterial, viral, and protozoal infections could be transmitted to the anorectum via anoreceptive intercourse. Anorectal sepsis is a medical emergency requiring immediate hospitalization and treatment, including surgical debridement and high dosages of broad-spectrum antibiotics. Rarely, perineal sepsis can occur as a complication of rubber band ligation or sclerotherapy of internal hemorrhoids.

Potential rectal complications arising out of HIV infection include infectious diarrhea, acyclovir-resistant strains of HSV2, Kaposi’s sarcoma, lymphoma, and squamous cell carcinoma.

**Treatment of anal fistula.** Patients with fistulas are generally referred to a specialist for treatment. In addition to simple fistulotomy, treatments include cutting or draining setons, endo-anal mucosal advancement flaps, sliding cutaneous advancement flaps, fistulectomy with muscle repair and fibrin glue injection.

**Treatment of pilonidal abscess and sinuses.** Pilonidal abscess could be drained under local anesthesia in the office. Sinuses could be laid open in the similar manner. Presence of hair in the wound is one of the prime causes of incomplete healing or recurrence. The hair should be meticulously shaved at regular intervals. Care should be taken that the wound continues to remain free of hair all the time.

Multiple or recurrent sinuses should be dealt only by specialty centers.

**Treatment of rectal prolapse.** Rectal prolapse could be mucosal or full thickness [Procedentia]. In mucosal prolapse, there is a complete eversion of the anal mucosa. On the other hand, rectal prolapse is a full-thickness evagination of the rectal wall outside the anal opening.

Treatment in both the situations is through surgical intervention. Various abdominal and perineal procedures are in vogue and the choice of procedure depends on factors like age of the patient and the presentation of the disease.

**Treatment of rectal polyps.** The commonest type is adenomatous polyp, which may be scattered throughout the colon. A complete colonic evaluation is mandatory to know the extension of the pathology. These polyps could well be a precursor to malignancy.

A child presenting with bleeding per rectum and protrusion of ‘something’ from the anus may have a juvenile rectal polyp, which needs colonoscopy, biopsy, and removal.

Occasionally, fibrous anal polyps may be found in association with anal fissures or hemorrhoids. These are also required to be removed.

**Treatment of malignancies of the rectum and anal canal.** Cancer of the ano-rectum could manifest in many different symptoms or may be incidentally found during rectal examination. Pain in the early stages is usually absent and the pathology may generally be considered and treated as ‘piles’ because of intermittent bleeding per rectum. An external or internal mass may be palpable. Anal cancer can present as an ulcer, as a polyp, or as a verrucous growth. Most anal cancers respond well to treatment with combined chemotherapy and pelvic radiation.

Colorectal cancers almost always need a surgical treatment. Once these cancers become symptomatic, the prognosis worsens. When it is found at early stage, 95 percent of patients with colorectal cancer could well survive for periods exceeding 5 years.

**Treatment of anal warts [Condylomas].** They present as warty growths in or around the anus. There may be a single wart, or there may be a crop growth of different sizes extending in the perineum and genitals. Though common in those who engage in anal intercourse, it can occur in patients with no such history. In them, the infection is believed to occur due to pooling of secretions in the anal area from elsewhere.

These warts can produce pruritus, soiling, bleeding and may be a constant source of irritation. Various office procedures are available for their treatment.

**Treatment of anal warts**

- Application of 85% Trichloroacetic acid [TCA]
- Cryotherapy
- Oral interferon and flurouradil
- Radiofrequency ablation
- Laser removal
- Electrodesiccation
- Surgery

**Treatment of inflammatory bowel diseases.** The anorectal area can be involved in several infectious and inflammatory processes. They present with rectal discomfort, tenesmus, rectal discharge, and constipation/increased frequency of stool. The rectal mucosa is often friable, usually associated with a mucopurulent discharge.

Ulcerative colitis or Crohn’s disease can involve the rectal area, presenting as proctitis or fistulae. A full-length colonoscopy and biopsy is needed to establish the diagnosis. The medical treatment proves beneficial in most of the patients. Drugs like Sulphasalazine, 5-Aminosalicylic acid and corticosteroids have often been
found effective in containing the problem. These medicines are also used in the form of suppositories and enemas.

In case of failure or recurrence of medical therapy, surgical intervention is indicated.

**Treatment of external anal tags.** They are usually asymptomatic. They are mere remnants of old thrombosed external hemorrhoids. If these tags cause symptoms like itching, anxiety, or hygienic problems, they can be removed under local anesthesia. If they are too extensive, excision may be needed under a short general anesthesia.

**Treatment of anal stenosis or stricture.** A conservative approach using stool softeners, osmotic agents, and lubricants that ensure smooth passage of stool is found effective in most of the cases. Regular anal dilatation using a metal dilator is another option in anal strictures of recent origin. If the above treatment fails, then surgical correction is needed.

**Solitary rectal ulcer.** Found less commonly, the pathology could affect patients of all ages. Chronic solitary ulcer is usually associated with defecation disorders and often confused with or mistaken for rectal cancer. The patient presents with a mass that is ulcerated. The appearance closely resembles cancer. The lesion must be biopsied to make sure that it is not neoplastic. Treatment includes laxatives and excision in appropriate cases.

**Treatment of incontinence.** Treatment is generally directed at the underlying cause and minimizing symptoms. Discrete muscle injuries are usually best treated by surgical sphincter repair. Fecal incontinence secondary to neuropathy is treated with bulking and antimotility agents. Recent approaches to the surgical therapy of incontinence include use of an artificial bowel sphincter, and the electrical stimulation of sacral nerves to modify pelvic floor function.

**Rectal injuries.** Rectal injuries may result from penetrating or blunt trauma, iatrogenic injuries, or presence of foreign bodies. Rectal injury should be suspected when a patient presents with low abdominal, pelvic, or perineal pain or blood per rectum after sustaining trauma or undergoing an endoscopic or surgical procedure. Tetanus prophylaxis, intravenous antibiotics, and surgical intervention are indicated in all but superficial rectal tears.

**Treatment of constipation.** It is a symptom, which is not measurable scientifically. It has more emotional components than physical and should therefore, be dealt with in a holistic manner.

It is important to find out whether the patient is complaining of infrequent defecation, excessive straining at defecation, abdominal pain or bloating, a general sense of malaise attributed to constipation, soiling, or a combination of more than one symptom. It is imperative to rule out any definable abnormality as a cause of the symptoms.

The approach for the treatment of constipation is multimodal. The patient should be reassured and asked to take current treatment for constipation, if any. He may be made aware of the need to recognize the call for stool, to attend to it forthwith, and to not to postpone it for any reason. He should be encouraged to adopt a regular defecation schedule.

Is daily dietary fiber intake should be increased and bulking agents like Ispaghula [pscyllium] methyl cellulose, bran, karaya gum, and similar preparations that are useful in facilitation of the defecatory process should be prescribed.

Lactulose, sorbitol, and lactitol have minimum known side effects and are considered safe in pregnancy and in children. They could also be prescribed to the elderly patients.

Senna, bisacodyl, sodium picosulphate, and magnesium salts should be used with caution as they could cause symptoms like bloating, colicky pain, and purging.

Low doses of polyethylene glycol and sodium phosphate could be used for intermittent lavage of the bowel. Drugs like Cisapride, Mosapride, tiotride, and Docusates are known to improve intestinal motility and could be prescribed for a prescribed duration.

Liquid paraffin is perhaps one of the most widely consumed oral laxatives. However, its long-term use could lead to reduced absorption of fat-soluble vitamins. Spontaneous leak of liquid paraffin from the rectum and soiling has been reported.

For patients with intractable constipation behavioral techniques to modify pelvic floor and intestinal function are now being considered as the mainstay of therapy.

Combination of bowel training, dietary management, and regular exercise could possibly help achieving a complete relief from the problem.

**Treating few other pathologies.** Proctitis is usually caused by sexually transmitted infections that could be treated with antibiotics. Pruritus ani due to fungal infections and hygiene problems are amenable to simple treatments. Thrombosed external hemorrhoids could be opened and drained. Perirectal or ischiorectal abscesses require incision and drainage, sometimes under general anesthesia.

Fulguration of polyps, rectal biopsy and the methods of rubber band ligation, infrared coagulation for removing hemorrhoids require no anesthesia. Anal fissures, warts, small fistulas could be removed with a minimal amount of anesthesia. Pilonidal cysts or abscesses could also be incised and drained in this manner.

Extensive fistulas, unusually large hemorrhoids with generalized prolapse of mucosa and disorders invol-
viving poor risk patient needs management in well-equipped hospitals.

**Ano-rectal pathologies under special circumstances**

**Ano-rectal lesions in children.** It is not uncommon to found children in a proctology clinic. They may present with congenital lesions like imperforate anus and its sequel, congenital megacolon or rectal polyps. 

More frequently, children are brought to the clinic with symptoms of constipation, rectal prolapse, anal fissures, hemorrhoids, and pruritus ani. Rarely, they may present with anal abscess and fistula.

Constipation is common in children. It is estimated that between 5% and 10% of pediatric patients have constipation. Constipation is the second most referred condition in pediatric gastroenterology practices, accounting for up to 25% of all visits. The diagnosis of constipation requires careful history taking and interpretation. Diagnostic tests are not often needed and are reserved for those who are severely affected. Infants and young children with chronic constipation and anal fissure are often found consuming larger amounts of cow milk than children with a normal bowel habit. Additionally, shorter duration of breastfeeding and early bottle-feeding with cow’s milk are reported to be responsible for development of constipation, which in turn may result in anal fissures in infants and young children.

The definitive therapy begins with rectal emptying of impacted stool followed by maintenance of regular soft stools to eliminate fear of pain with defecation. It often requires prolonged support by physicians and parents, detailed counseling, explanation, medical treatment, and, most importantly, the child’s cooperation.

The primary treatment of perianal abscess in childhood should involve a careful search for a coexisting fistula and treatment there of by fistulotomy. Simple drainage of a perianal abscess is frequently followed by a fistula.

Anal fissures in children could be treated using stool softeners like lactulose, use of anesthetic ointment and maintenance of local hygiene. Topical glyceryl trinitrate ointment has also been found effective in healing chronic anal fissures in children.

Rectal polyps, hemorrhoids require definitive treatment. Mucosal prolapse should be approached with a conservative attitude including use of laxative to avoid straining and strengthening of pelvic musculature with biofeedback techniques. Injection of sclerosants in the prolapsing mucosa to induce fibrosis has also been found useful. Surgery is resorted to only in cases of intractable lesions or complete prolapse.

**Managing ano-rectal pathologies during anti and postpartum periods.** Anal fissure in women is one of the common lesions seen during the prenatal period. The symptoms may exacerbate in a previously present lesion or may arise de-novo. The most probable cause for these development is the terminal constipation, which itself may occur due to several factors.

Thrombosed external hemorrhoids and anal fissures may also cause severe discomfort during childbirth. While over 90% of thrombosed external hemorrhoids are found to occur during the first day after delivery, the development of anal fissures may be seen in the first two months. The most important risk factor is dyschezia. Traumatic delivery is another precipitating factor. It is estimated that almost 10% of the delivered women develop anal fissure. To summarize, almost 1/3rd of pregnant women develop anal fissures and thrombosed external hemorrhoids after delivery. Managing constipation during and after gestation can minimize most of the ano-rectal lesions and their symptomatic outcome.

Anal fissure during the antepartum period may require a surgical procedure. The patient should be explained about the pros and cons of operative and non-operative approaches, which can result in either therapeutic abortion, or timely surgery versus preserving the fetus. There is a need to take care of the unknown factor of delay in treatment resulting into an adverse outcome. Under the situation, there necessarily is a tilt in favor of adopting a conservative approach. Yet the patient’s ability to tolerate the symptoms of her condition should dictate the need for a definitive operative therapy.

**Managing ano-rectal conditions in the elderly.** Constipation, hemorrhoids with their complications, rectal prolapse and malignancy are common in the elderly. Rectal bleeding can become life threatening in elderly patients. Increased prevalence of atherosclerosis, impaired general health, decreased mobility, and lack of physical activities aggravates the problems. Although hemorrhoids are the commonest cause of rectal bleeding, most patients over 40 years presenting with this symptom should undergo a colonoscopy in order to screen for and treat premalignant polyps and colorectal cancer.

Hemorrhoidal thrombosis, rectal mucosal prolapse, anal fissure, and constipation should be dealt with a conservative approach or minimum possible surgical intervention. The potential risks of anesthetic and surgical complications may be carefully weighed with the benefits of the surgical procedures.

However, in such patients, the advantages of the endoscopic, angiographic, or surgical intervention need
not be withheld for reason of age alone. The timing of tests and the type of intervention could be customized for weak and frail elderly patients. Such a decision should depend upon functional status, its impact on outcome, and the consent process.

**Role of ‘Hemorrhoid creams’ or suppositories in proctology.** Most of the creams or suppositories used in the treatment of hemorrhoids are directed at reducing the pain and containing the itching symptoms. The common ingredients of such creams are steroidal, local anesthetics, and atipruritic agents.

Ointments containing opiates, xylocain, amethocain, and cinchocain to relieve pain, belladonna to alleviate sphincter spasm and silver nitrate to promote healing have all had in vague since long. These mixtures are introduced either with the finger or through a short rectal bag to ensure a thorough application over the affected part of the anus. Recent reports of topical application of Solcoderm, Ketanserin gel, a eutectic mixture of 5% Prilocain and 5% Lidocain or combination of Poliresulen and Cinchocain [Faktu by Ranbaxy Stanca-re, India] has shown good symptomatic relief in anal pain.

Topical nifedipine and isosorbide dinitrate ointment, which at present are being used for treatment of cardiovascular disorders, have been reported to be useful in the treatment of anal fissures and acute strangulated internal hemorrhoids.

The best practice of using these preparations is to insert them over an anal dilator, which also helps relieve the sphincter spasm. Alternately emollient suppositories containing some of the above preparations could be used with the identical results.

The possible complication with such ointments and creams is local and systemic allergy and loss of the anal dilator in the rectum. Nitroglycerine ointment is known to cause severe headache after application.

Another local application is ANUICE®, which is made of a hospital grade plastic and contains a coolant inside. It is placed in the freezer inside a special container and then the frozen applicator is directly applied over the swollen hemorrhoidal area. It is claimed that it relieves the painful discomfort of hemorrhoids, by reducing the inflammation due to its cool numbing effect, which is popularly known as ‘Cryotherapy’.

**CONCLUSION**

Advances have been made in understanding the pathogenesis and management of various anorectal disorders. Each disorder is suggested by its characteris-