New trends in management of proctalgia fugax.

Prof. Waleed Omar MD, PhD.

Prof of colorectal surgery

Head of colorectal surgical unit

Mansoura Faculty of Medicine

Background

- **Proctalgia syndromes** are **chronic or relapsing anorectal pain in the absence** of an **underlying anorectal or pelvic disease** with **normal clinical examination and investigations.**
- Often neglected disabling conditions.
- The symptoms can cause significant **impairment in quality of life,** and **psychological distress.**
- Occur in about **6%** of patients.

Chiarioni et al. World J Gastroenterol. 2011;17:4447–50.
Drossman, et al. DigDis Sci. 1993;38:1569–80.

Background

- These syndromes carry a **diagnostic and therapeutic challenge** for the colorectal surgeon.
- **Multidisciplinary approach** comprising coloproctologists, urologists, gynecologists, gastroenterologists, or pain specialists may be required for the diagnosis and management.
- **The precise etiology is unknown.**
- **Pelvic floor hypertonia** has traditionally been considered as the relevant underlying factor.
- Exclusion of an underlying **psychosomatic disorder** may be relevant.

Chiarioni et al. World J Gastroenterol. 2011;17:4447–50.

Functional Anorectal Pain

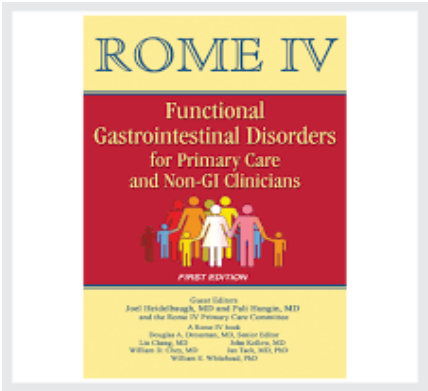
- **The Rome IV criteria,** described **3 types** of functional anorectal pain:

❖**Levator ani syndrome(LAS).**

❖**Unspecified functional anorectal pain(UFAP).**

❖**Proctalgia fugax.**

- These types are primarily distinguished by **differences in the duration of pain** and the **presence or absence of anorectal tenderness.**



Rao, et al. Gastroenterology. 2016;150:1430–42.

LAS and UFAP pain

❑**Rome IV** defines LAS and UFAP as :

✓Chronic or **recurrent aching** rectal pain.

✓Lasting **at least 30 min(≥ 30min),** without evidence of a structural or systemic explanation.

✓**Defecation** can trigger the condition.

- **LAS** is distinguished from UFAP by the **presence of tenderness on palpation of the levator ani muscle** during DRE.
- **Pain duration of at least 30 min is a key diagnostic feature of LAS and UFAP from proctalgia fugax.**
- Each set of criteria must be **fulfilled for the last 3 months** with **symptom onset at least 6 months before diagnosis.**

Rao, et al. Gastroenterology. 2016;150:1430–1442
Atkin et al, Dis Colon Rectum. 2011;54:870–875
de Paredes, et al. Dis Colon Rectum. 2006;50:893–989

Proctalgia fugax pain

❑**Proctalgia fugax is characterized by:**

✓**Sharp, stabbing, cramping, recurring** anorectal pain.

✓In **the absence of organic proctologic or pelvic disease.**

✓**Unrelated to defecation.**

✓Should last **less than 30 min.**

✓**Complete remission between attacks.**

- Each set of criteria must be **fulfilled for the last 3 months** with **symptom onset at least 6 months before diagnosis.**

Rao, et al. Gastroenterology. 2016;150:1430–1442
Atkin et al, Dis Colon Rectum. 2011;54:870–875

Current Gastroenterology Reports (2020) 22: 35
https://doi.org/10.1007/s11894-020-00768-0

LARGE INTESTINE (R CHOKSHI , SECTION EDITOR)

Proctalgia Syndromes: Update in Diagnosis and Management

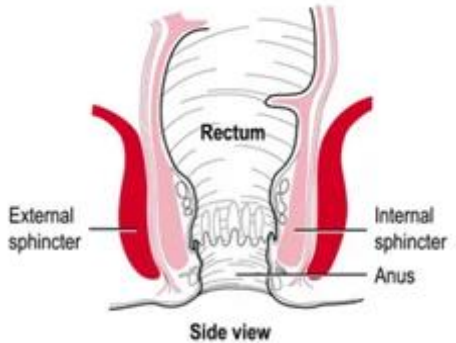
Emma Victoria Carrington[1] · Stefan-Lucian Popa[2] · Giuseppe Chiarioni[3,4]

Table 1 Clinical features and objective findings in functional anorectal pain syndromes

Syndrome	Pain features	Pain radiation	Pain triggers	Digital rectal exam
Levator ani syndrome	Chronic dull rectal ache or pressure sensation, lasting > 30 min	Vagina, thigh, gluteus	Prolonged sitting, stress, defecation	Tender puborectalis, replicates pain features
Unspecified functional anorectal pain	Chronic dull rectal ache or pressure sensation, lasting > 30 min	Vagina, thigh, gluteus	Prolonged sitting, stress, defecation	Uneventful
Proctalgia fugax	Fleeting rectal cramping, lasting from seconds up to 30 min	None	Prolonged sitting, sexual intercourse, stress	Mostly uneventful, seldom hypertonic sphincter in congenital myopathy

Etiology

- There are several proposed etiological mechanisms for proctalgia fugax.
- **Anal sphincter spasm** is the most thought theory.
- In one study; patients who developed symptoms, there was **a further rise in anal resting tone** and increased slow wave amplitude.
- **The internal anal sphincter activity** is thought to be **increased** by **sympathetic activity** which may explain the correlation of the symptom with **stress.**



Eckardt, et al. Dis Colon Rectum.1996; 39(7):755–762
McHugh et al. Dig Dis Sci.1987;32(7):726–736

Predisposing factors

- ✓Prolonged sitting.
- ✓Sexual intercourse.
- ✓Stress.
- ✓Constipation
- ✓Alcohol drinking
- ✓Cold nights
- ✓Sclerotherapy for piles or after vaginal hysterectomy.
- ✓**Pudendal nerve neuralgia** is another reported cause of proctalgia fugax.
- ✓However; most patients don’t report particular trigger events.

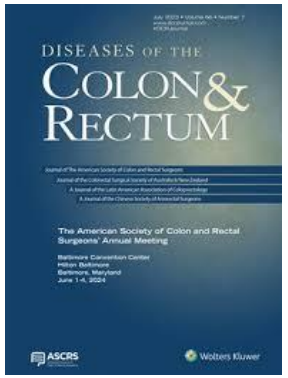
Armananzas, et al. Cir Esp. 2015;93:34–8.
Takano, Dis colon Rectum. 2005;48(1): 114-120
McEwin. Med J Aust.1956;43(9):337–340
Mountifield. Cmaj.1986;134(11):1269–1270

Proctalgia Fugax: Caused By Pudendal Neuropathy?

Takano, Masahiro M.D.[1,a]

Author Information

Diseases of the Colon & Rectum 48(1):p 114-120, January 2005. | ***DOI:*** 10.1007/s10350-004-0736-3



➢Methods:

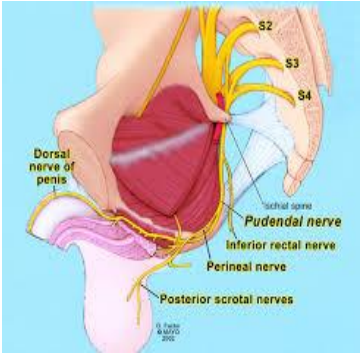
- **68 patients** with proctalgia fugax, where **55 had tenderness along the pudendal nerve.**

➢Results:

- Nerve block **relieved symptoms completely in 65%** of patients and **decreased symptoms in 25% of patients.**

➢Conclusion:

- The pathogenesis of proctalgia fugax may be **neuralgia of the pudendal nerve.**



Clinical presentation of proctalgia fugax

- **Stabbing, cramping, or spasm like** anorectal pain.
- Patients usually describe the symptoms like **“blunt knife”** inserted into the rectum.
- Concomitant symptoms are **rare** but may include: **nausea, vomiting, sweating and dizziness.**
- Attacks of pain occur at irregular spaced time intervals (1-180/year).
- It was reported that passage of flatus may decrease the pain in selected patients.

Thaysen EH. Proctalgia fugax. Lancet. 1935;2:243–246.
Atkin et al, Dis Colon Rectum. 2011;54:870–875
de Paredes, et al. Dis Colon Rectum. 2006;50:893–989

Diagnosis of proctalgia fugax

- Usually, patients are **asymptomatic** during clinical examination.
- So, **detailed history** is very important.
- DRE to exclude rare **hypertrophic myopathy of the internal anal sphincter (Familial forum of proctalgia fugax).**

❖**Investigations:** Endoanal US, anal manometry , EMG, pudendal nerve test ± MRI pelvis or even colonoscopy to exclude any organic pelvic or recto-anal causes.

❖Exclusion of other causes of anorectal pain: hemorrhoids, cryptitis, ischemia, intramuscular abscess or fissure, rectocele, malignancy and inflammation , before making the diagnosis is mandatory.

Jeyarajah, et al. Int J Color Dis.2010;25:1037–46.
de la Portilla , et al. Eur J Gastroenterol Hepatol.2005;17(3):359–61.

Management

❖**Mild symptoms:** Reassurance and avoidance of trigger events.

❖**Definitive treatment:** **the aim** is to **relax the internal anal sphincter.**

- **Warm sitz baths, warm tap water enemas** are often suggested as simple interventions to achieve rapid sphincter relaxation.
- **Oral calcium channel blockers** (diltiazem) and topical **nitroglycerin ointment** which have been shown to decrease anal sphincter pressure have both been reported to be effective in small case series.

Parés & Abcarian. Am J Med. 2018;131:745–51.
Jeyarajah et al. Int J Color Dis.2010;25:1037–46.
Armananzas, et al. Cir Esp. 2015;93:34–8.

Management

- **Oral clonidine (Antihypertensive):**
- An alpha 2 adrenoceptor agonist which acts by inhibiting the post synaptic neuron or inhibiting release of the neurotransmitter from the presynaptic neuron.
- These receptors are located on sympathetic and parasympathetic nerve terminals in the GI tract, so it can cause relaxation of the rectal muscle and sphincter because of its antispastic effect.

Swain. Gut.1987;28(8):1039–1040

Clinical Trial > Am J Gastroenterol. 1996 Apr;91(4):686-9.

Treatment of proctalgia fugax with salbutamol inhalation

V F Eckardt [1], O Dodt, G Kanzler, G Bernhard

- **Methods:**
- RCT including 18 patients with proctalgia fugax.
- The clinical effect was evaluated by recording the duration of severe pain and discomfort during acute attacks.
- **Results:**
- Inhaled salbutamol was more effective in shortening pain duration than placebo specially in those having prolonged attacks.
- **Conclusion:**
- Salbutamol inhalation shortens attacks of severe pain in patients with proctalgia fugax. **The mechanism of this effect remains unexplained.**

Eckardt, et al. Am J Gastroenterol.1996;91:686–9.

Management

CASE REPORT

Use of botulinum A toxin for proctalgia fugax—a case report of successful treatment

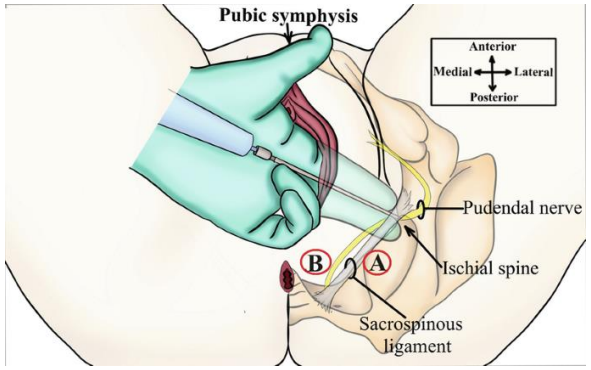
Marios Grigoriou[1], Aristeidis Ioannidis[2], Konstantinia Kofina[2,*], and Christoforos Efthimiadis[2]

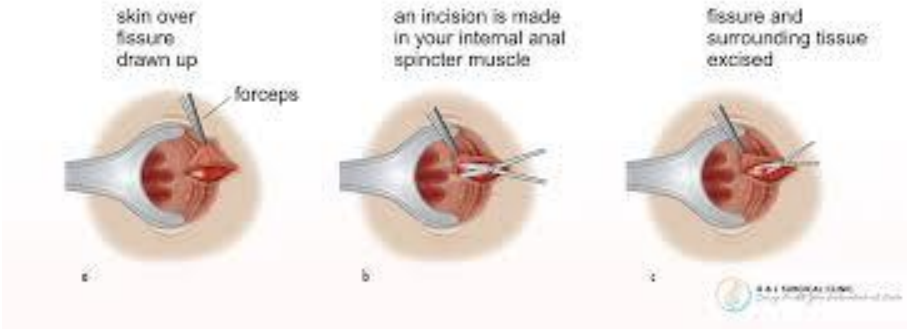
- In patients unresponsive to drug treatment; **Botox** injections have been reported effective on relieving the pain in case series.
- A toxin injection can reduce internal anal sphincter pressure, leading to relief of symptoms, and seems a promising option with minimal morbidity in cases on proctalgia fugax that does not respond to other current treatments.
- However, the Botox treatment has not been validated by RCTs.

Grigoriou, et al. J Surg Case Rep. 2017;29:rjx236

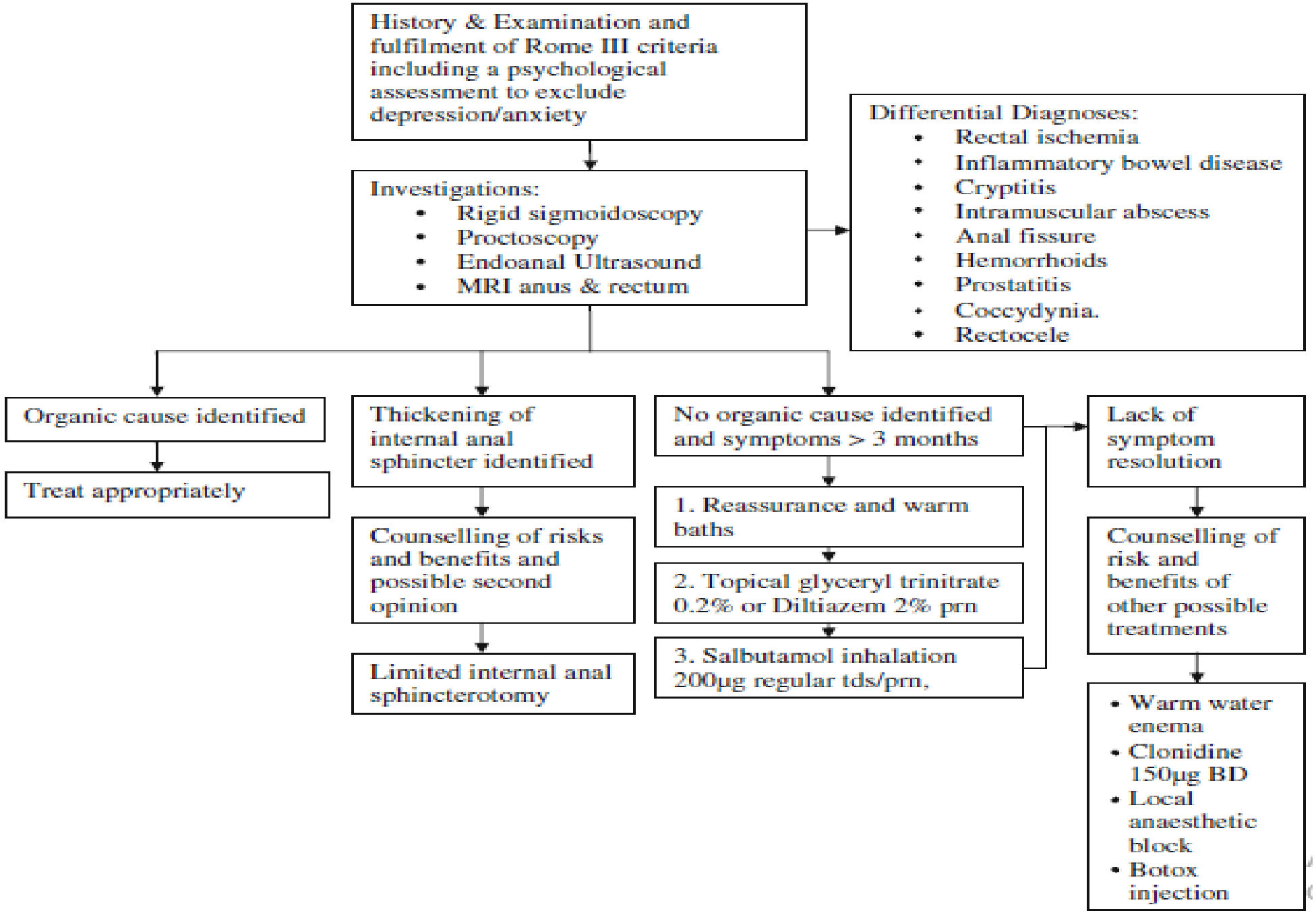
Management

- The patients who are affected by the rare **hypertrophic myopathy of the internal anal sphincter** when endoanal ultrasound showed internal anal sphincter thickening of greater than 3.5 mm.
- **Strip myomectomy** has been reported more effective on improving comorbid constipation than proctalgia.
- Patients with diagnosed pudendal nerve compression with proctalgia fugax can be treated with local pudendal nerve block and complete resolution with pudendal nerve decompression.





Kamm, et al. Gastroenterology. 1991;100:805–810.
Bascom. Dis Colon Rectum.1998;41(3):406


History & Examination and fulfilment of Rome III criteria including a psychological assessment to exclude depression/anxiety
Investigations:
• Rigid sigmoidoscopy
• Proctoscopy
• Endoanal Ultrasound
• MRI anus & rectum
Differential Diagnoses:
• Rectal ischemia
• Inflammatory bowel disease
• Cryptitis
• Intramuscular abscess
• Anal fissure
• Hemorrhoids
• Prostatitis
• Coccydynia.
• Rectocele
Organic cause identified
Treat appropriately
Thickening of internal anal sphincter identified
Counselling of risks and benefits and possible second opinion
Limited internal anal sphincterotomy
No organic cause identified and symptoms > 3 months
1. Reassurance and warm baths
2. Topical glyceryl trinitrate 0.2% or Diltiazem 2% prn
3. Salbutamol inhalation 200µg regular tds/prn,
Lack of symptom resolution
Counselling of risk and benefits of other possible treatments
• Warm water enema
• Clonidine 150µg BD
• Local anaesthetic block
• Botox injection

Summary and Conclusion

- Patients with functional anorectal pain present with ill-defined symptoms of pelvic pain without any physical abnormality.
- Pain may be severe, and may significantly affect patients' quality of life.
- Diagnosis relies heavily on a detailed clinical history and DRE.
- Rome IV criteria is mandatory for diagnosis.
- Other organic pathology should be excluded before diagnosis of proctalgia.
- Conservative therapies are the mainstay of treatment and are generally focused on symptom improvement rather than cure.
- Unfortunately, the management of proctalgia fugax remains a therapeutic dilemma and further evidence to guide therapy is eagerly awaited.


Thank
You