

Pelvic pain - Beckenschmerz aus gastroenterologischer Sicht

Interdisziplinäres
Beckenbodenzentrum



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Rome III Functional Gastrointestinal Disorders

F Functional anorectal disorders

F1 Functional fecal incontinence

F2 Functional anorectal pain

F2a Chronic proctalgia / Chronic anal pain syndrome

F2a1 Levator ani syndrome

F2a2 Unspecified functional anorectal pain

F2b Proctalgia fugax/ intermittent chronic anal pain syndrome

F3 Functional defecation disorders

F3a Dyssynergic defecation

F3b Inadequate defecatory propulsion

Intermittent chronic anal pain syndrome (proctalgia fugax) consists of all the following diagnostic criteria:

1. Recurrent episodes of pain localised to the anus or lower rectum.
2. Episodes last from several seconds to minutes.
3. There is no anorectal pain between episodes.

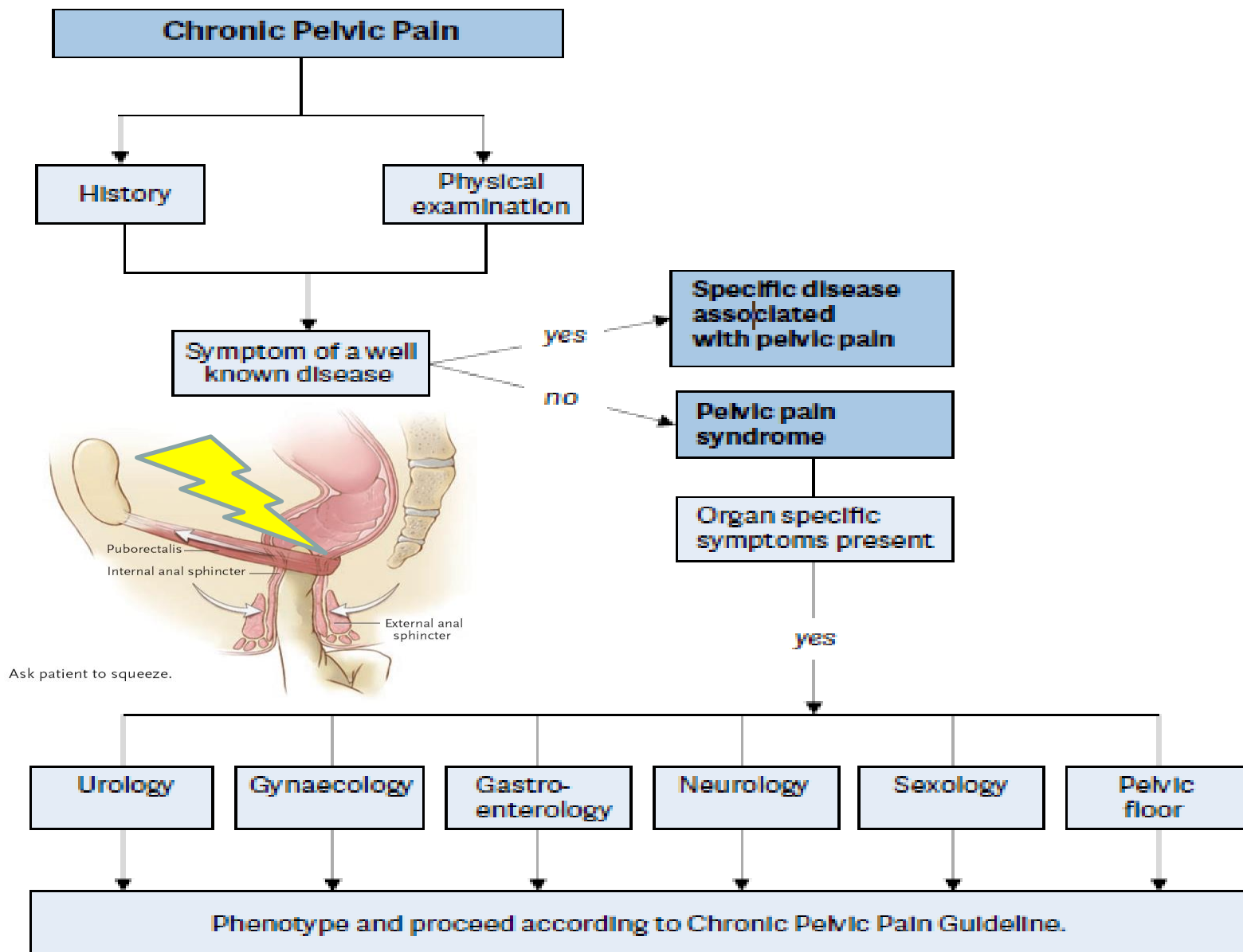
**For research purposes, criteria must be fulfilled for 3 months; however, clinical diagnosis and evaluation may be made before 3 months.*

Diagnostic criteria for chronic anal pain syndrome (chronic proctalgia) according to Rome III criteria must include all of the following:

1. Chronic or recurrent rectal pain or aching.
2. Episodes last at least 20 min.
3. Exclusion of other causes of rectal pain such as:
ischaemia, inflammatory bowel disease, cryptitis, intramuscular abscess and fissure, haemorrhoids, prostatitis, and coccygodynia

Levator ani syndrome: Above criteria and tenderness during posterior traction on the puborectalis.

**Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis.*



Patient Characteristics and Treatment Outcome in Functional Anorectal Pain:

Principal location of pain

	<i>All patients (n = 170)</i>	<i>Proctalgia fugax (n = 12)</i>	<i>Chronic proctalgia (n = 158)</i>
Anus	153	11	142
Rectum	15	1	14
Perineum	2	0	2

St. Mark's Hospital, Harrow, Middlesex, United Kingdom
Atkin GK, DISEASES OF THE COLON & RECTUM VOLUME 2011

Initial event marking onset of anorectal pain symptoms

	<i>All patients (n = 170)</i>	<i>Proctalgia fugax (n = 12)</i>	<i>Chronic proctalgia (n = 158)</i>
None	122	8	114
Childbirth	11	0	11
Minor anal surgery	10	1	9
Pelvic surgery	7	2	5
Physical activity	6	0	6
Straining at stool	5	0	5
Gastroenteritis	4	0	4
Anal sex/trauma	2	0	2
Anal fissure	2	1	1

Atkin GK, DISEASES OF THE COLON & RECTUM VOLUME 2011

Aggravating factors (57 patients reported >1 factor)

	<i>All patients (n = 170)</i>	<i>Proctalgia fugax (n = 12)</i>	<i>Chronic proctalgia (n = 158)</i>
None	35	6	29
Defecation	89	2	87
Sitting	50	4	46
Emotional stress	23	1	22
Physical activity	20	0	20
Standing upright	9	1	8
Heterosexual sex/orgasm	4	1	3
Menstruation	4	1	3
Lying down	3	0	3
Micturition	1	0	1

Atkin GK, DISEASES OF THE COLON & RECTUM VOLUME 2011

Relieving factors (10 patients reported >1 factor)

	<i>All patients (n = 170)</i>	<i>Proctalgia fugax (n = 12)</i>	<i>Chronic proctalgia (n = 158)</i>
None	123	9	114
Lying down/relaxation	19	1	18
Defecation	12	0	12
Physical activity	4	0	4
Digital anal pressure	4	1	3
Hot bath	4	0	4
Straining at stool	3	1	2
Passing flatus	2	0	2
Micturition	1	0	1
Sitting	1	0	1

Atkin GK, DISEASES OF THE COLON & RECTUM VOLUME 2011

Treatments, initial and permanent improvement, and magnitude of effect (n 74, some patients >1 intervention)

<i>Intervention</i>	<i>No. treated</i>	<i>Total no. improved</i>	<i>No. with permanent improvement</i>	<i>Magnitude of treatment benefit</i>
Biofeedback therapy	28	17	16	10.8
Tricyclic antidepressant	24	10	9	5
Topical GTN	11	4	3	1.6
Topical diltiazem	9	3	2	1.2
Botox injection	9	5	3	2.2
Psychotherapy	6	3	3	1.6
Pudendal nerve block	4	4	1	1.4
Carbamazepine	4	1	1	0.4
Lateral sphincterotomy	3	0	0	0
Sacral nerve stimulation	3	2	2	1
Gabapentin	3	2	2	1
Tricyclic + gabapentin	2	2	2	1.2
Oral diltiazem	2	0	0	0

CP = chronic proctalgia; GTN = glyceryl trinitrate.

Biofeedback Is Superior to Electrogalvanic Stimulation and Massage for Treatment of Levator Ani Syndrome

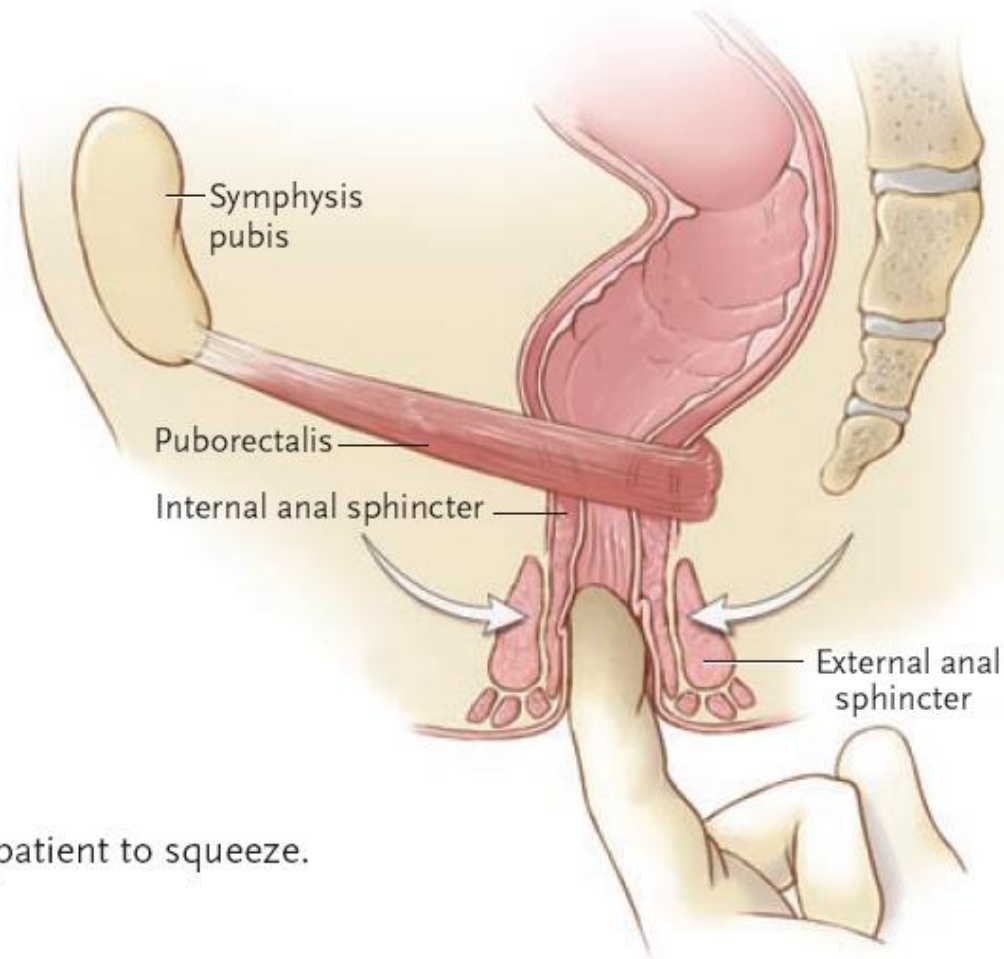
Design:

- prospective, randomized controlled trial
- to compare the effectiveness of biofeedback (pelvic floor relaxation), electrogalvanic stimulation (EGS), or massage of levator muscles

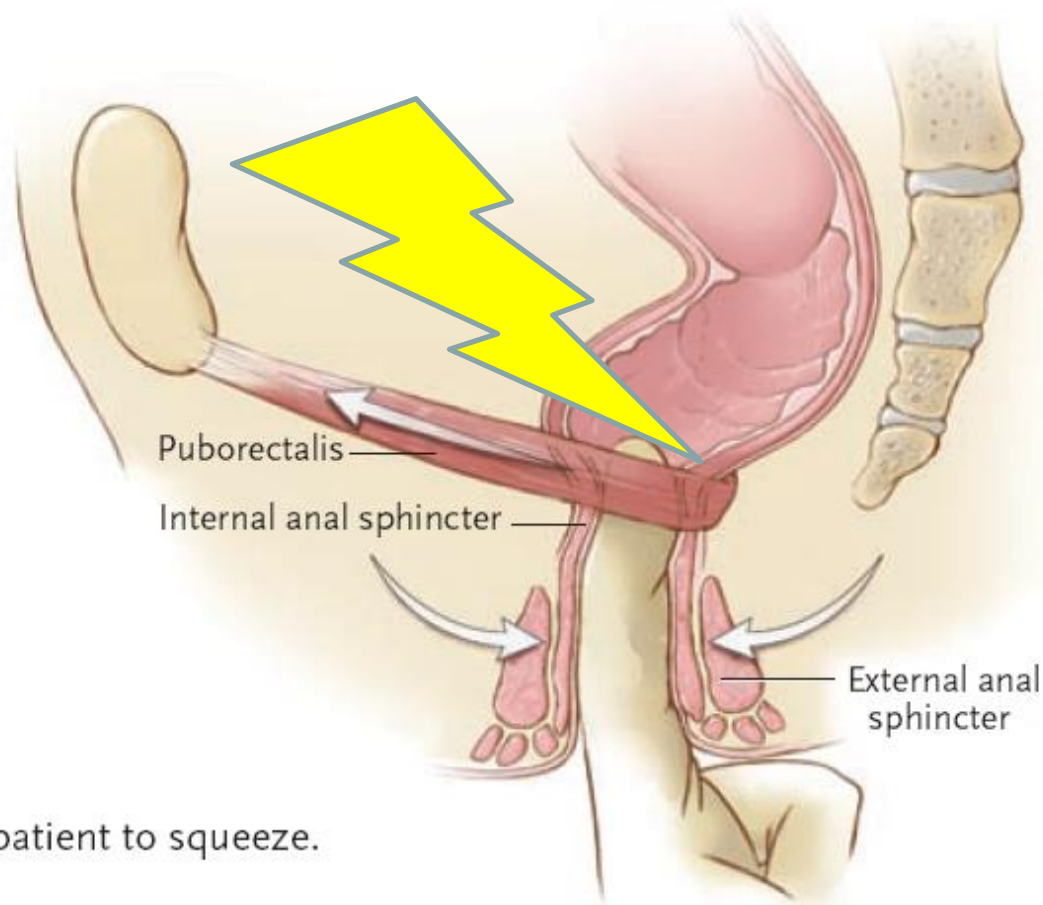
Methods:

- Rome II criteria plus weekly pain.
- Patients were categorized as “highly likely”/ “possible” for LAS according to tenderness with traction on the levator muscles
- All 157 patients received 9 sessions including psychologic counseling plus biofeedback, EGS, or massage.
- **Outcomes were reassessed at 1, 3, 6, and 12 months.**

Digital rectal examination: Anal sphincter

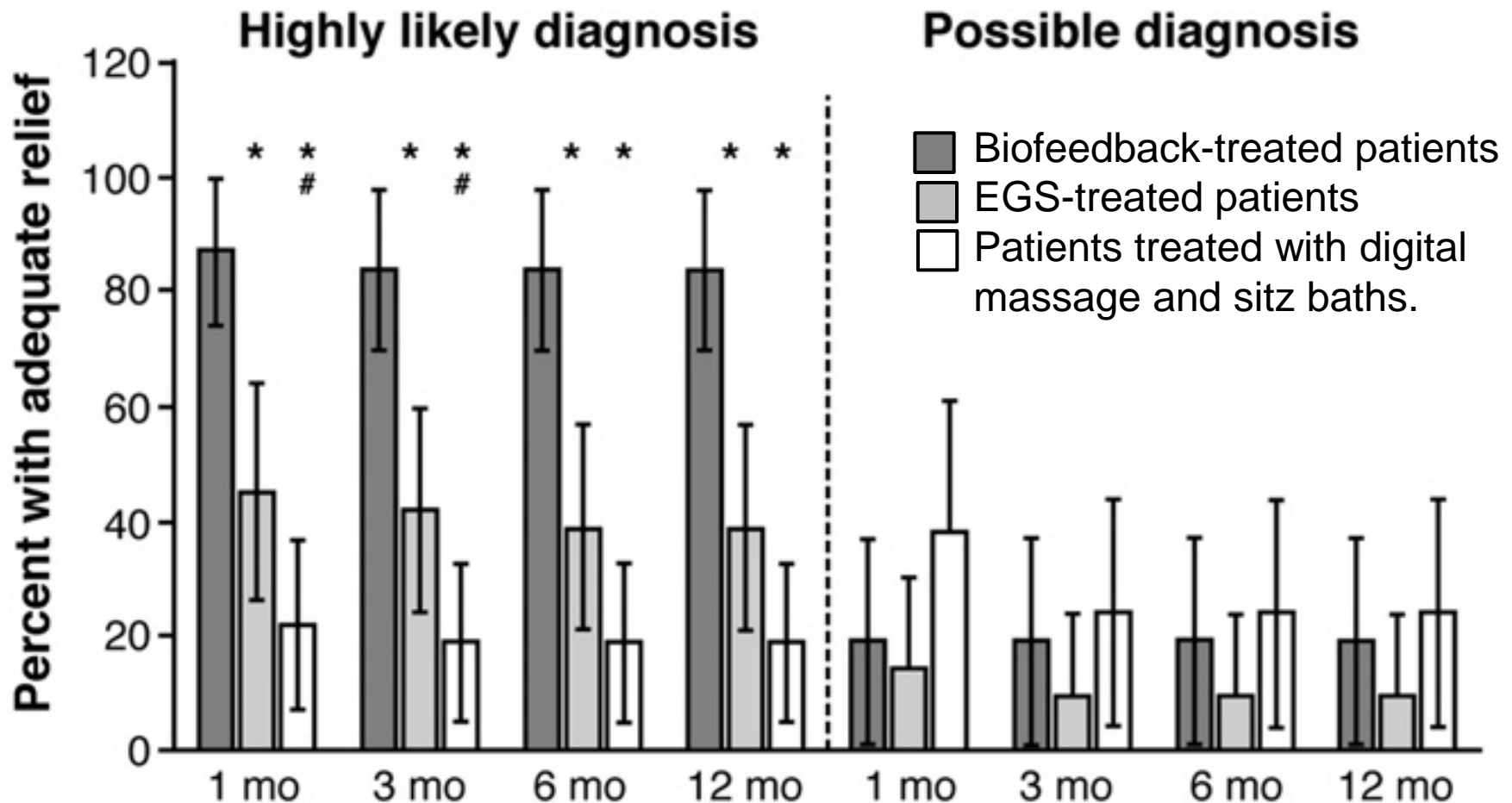


Tenderness of puborectal muscle on digital traction



Ask patient to squeeze.

Biofeedback Is Superior to Electrogalvanic Stimulation and Massage for Treatment of Levator Ani Syndrome

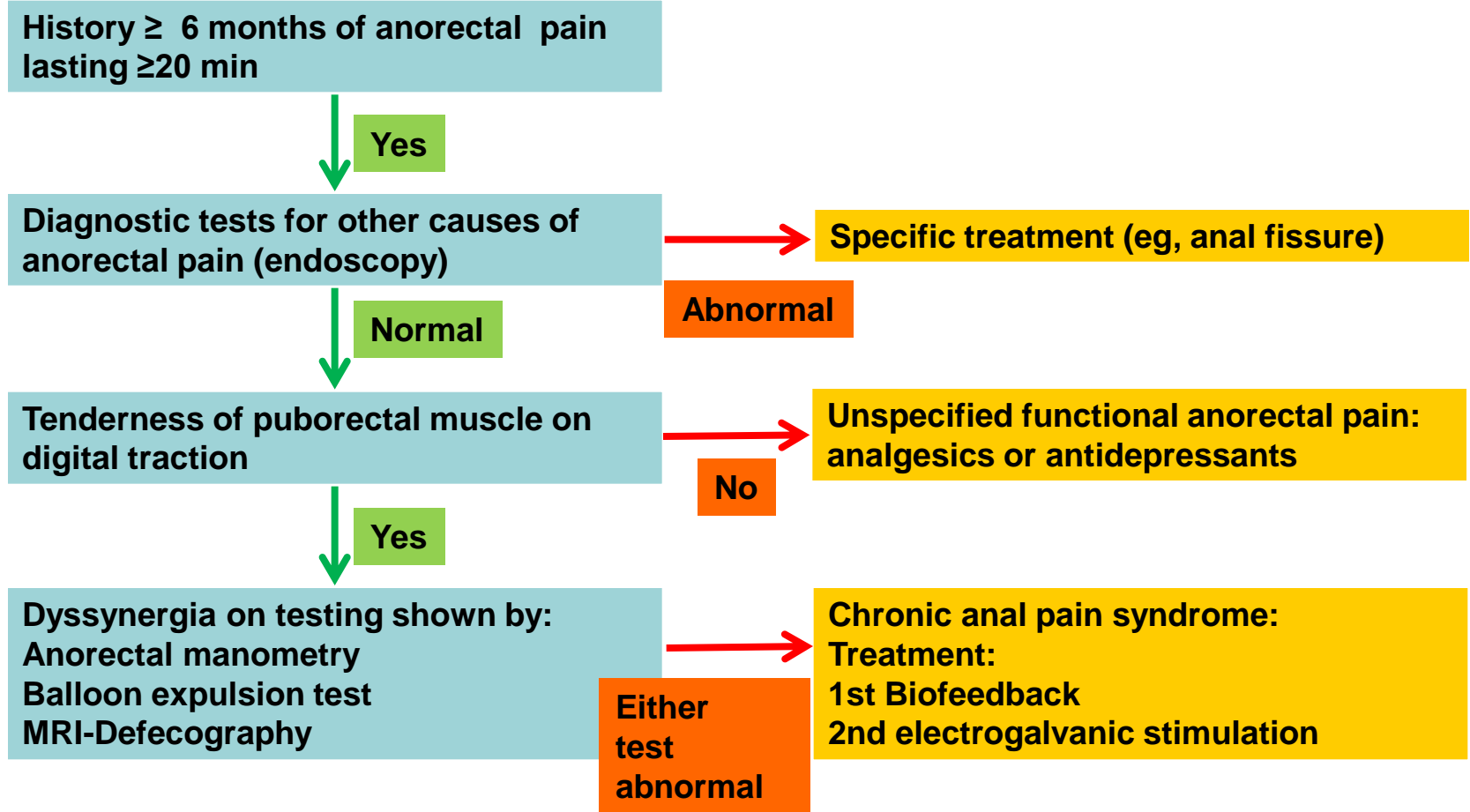


GASTROENTEROLOGY 2010;138:1321–1329

Biofeedback Is Superior to Electrogalvanic Stimulation and Massage for Treatment of Levator Ani Syndrome

- Patients with only a “possible” diagnosis of LAS did not benefit from any treatment.
- Biofeedback and EGS improved LAS by increasing the ability to relax pelvic floor muscles and evacuate a water-filled balloon and by reducing the urge and pain thresholds.
- **Biofeedback is the most effective of these treatments, and EGS is somewhat effective.**
- **Only patients with tenderness on rectal examination benefit. The pathophysiology of LAS is similar to that of dyssynergic defecation.**

Algorithm for the diagnosis and management of chronic anal pain syndrome

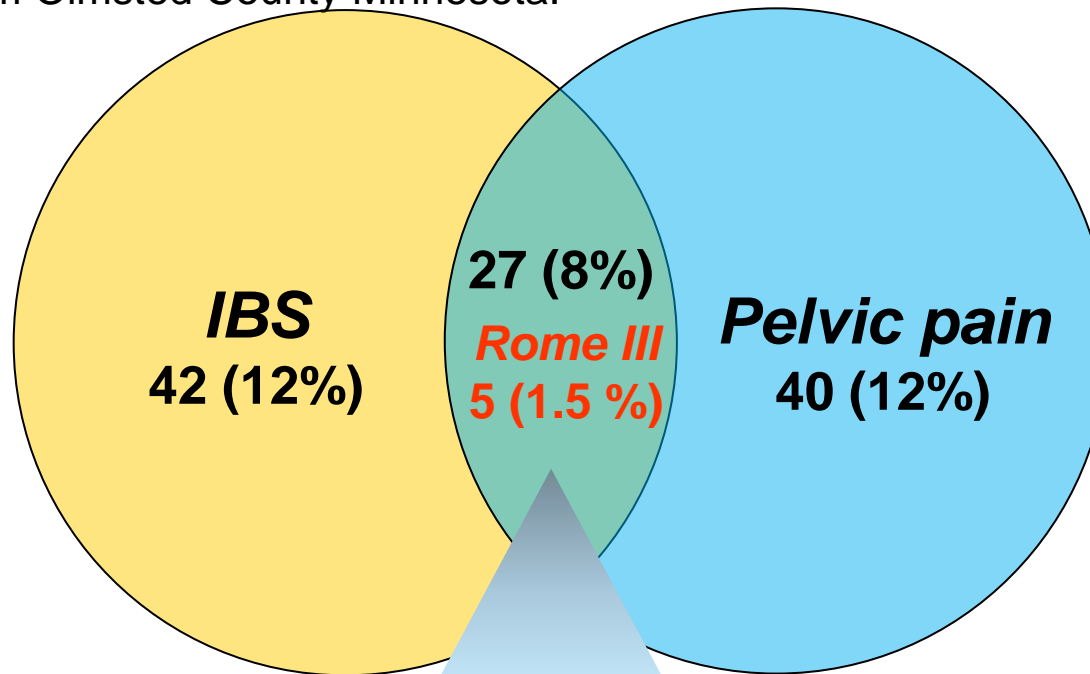


Gastrointestinal pelvic pain and overlap...

1. **Considerable overlap** of gastrointestinal with other functional disorders and pelvic pain syndromes.
2. **Defined gastrointestinal conditions** with specific structural defects and diseases may coexist.
3. Behavioural changes such as straining can lead to **organic diseases** (rectal prolapse, solitary rectal ulcer syndrome, or pudendal nerve injury)
4. Some structural gastrointestinal abnormalities (e.g., postpartum anal sphincter defects, or small rectoceles) may be **coincidental** with the gastrointestinal pelvic pain syndrome.
5. Different diseases can **aggravate** previously a symptomatic functional disorders (faecal incontinence in patients with diarrhoea)
6. Functional disorders such as anorectal pain are defined **retrospectively** vs prospectively with symptom diaries.

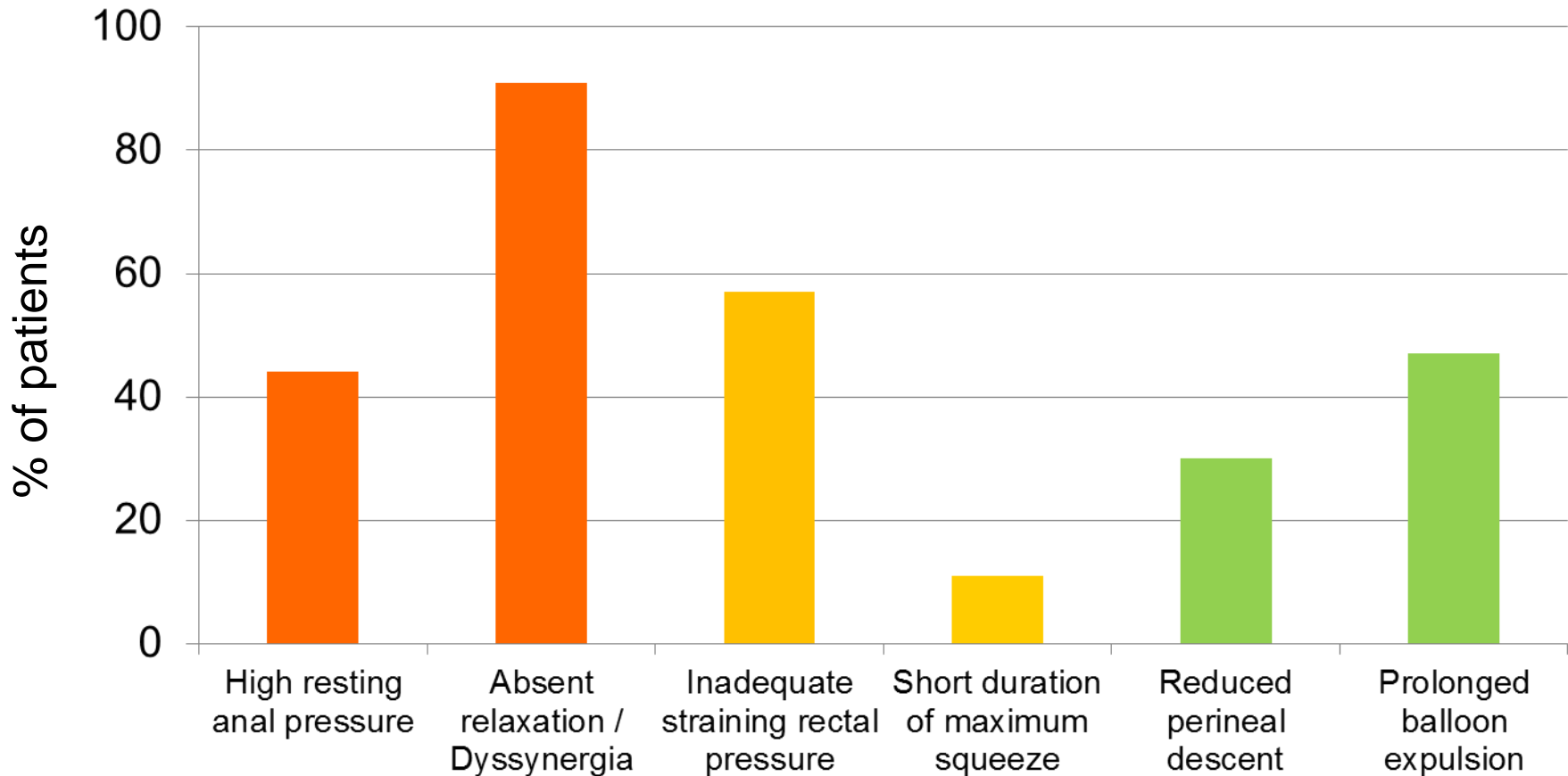
Olmsted County, Minnesota: Prevalence of CPP was 20% among women

Number and proportion of women with IBS alone, pelvic pain alone, and both from Olmsted County Minnesota.



High somatization scores, depression, and dizziness were all individually associated with IBS-pelvic pain overlap versus both IBS alone and pelvic pain alone.

Relationships between pelvic floor symptoms and function in IBS: **Prevalence of abnormal anorectal physiology**



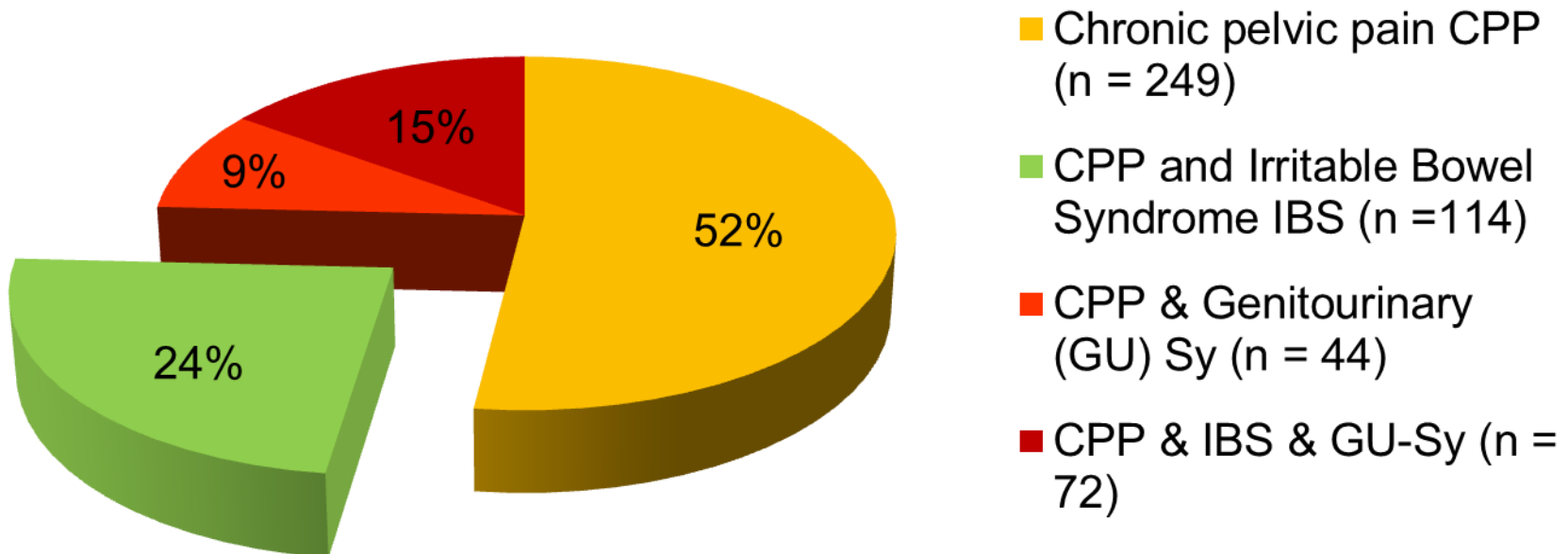
University of Sydney, Sydney, NSW, Australia

Neurogastroenterol Motil (2010) 22, 764–769



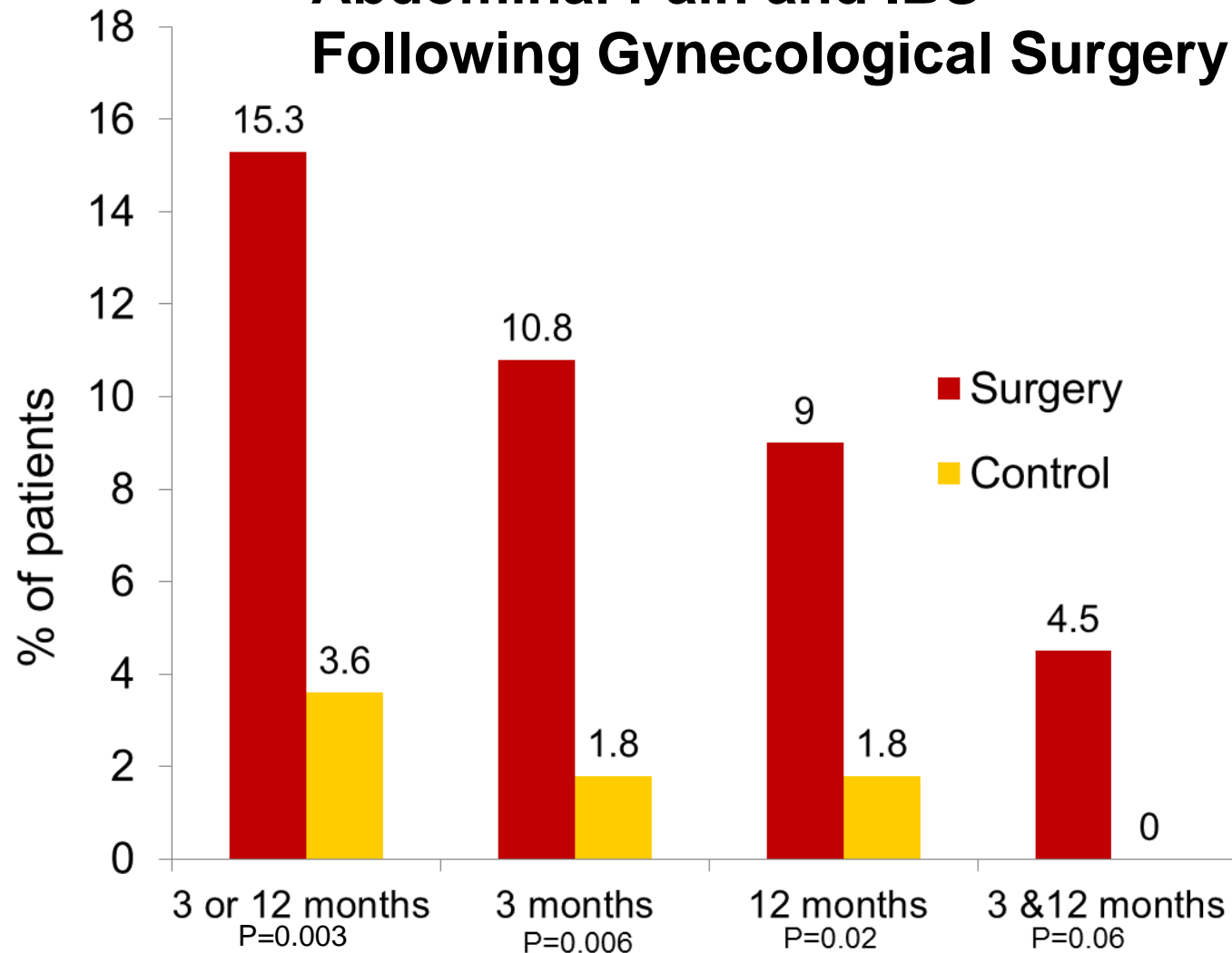
All chronic pelvic pain (n = 483; 24%)

Oxfordshire Health Authority Register:
2016 Questionnaires



Am J Obstet Gynecol 2001;184:1149-55

Abdominal Pain and IBS Following Gynecological Surgery



Incidence of abdominal pain (no pain at baseline)

Development of Abdominal Pain and IBS Following Gynecological Surgery: A Prospective, Controlled Study

Methods:

- 132 women without GI symptoms
- Elective gynecological surgery for nonpainful conditions were compared with:
- 123 nonsurgery controls without GI symptoms
- Socio-demographic, psychosocial, and surgery-related variables were potential predictor variables of pain at 3 and/or 12 months.

GASTROENTEROLOGY 2008;134:75–84

Development of Abdominal Pain and IBS Following Gynecological Surgery: A Prospective, Controlled Study

Results:

- No patients in either group met the Rome II criteria for IBS at 3 months;
- 3 patients in the surgical group (2.7%) met the Rome II criteria for IBS at 12 months vs 0 in the control group.
- **However, abdominal pain did develop in 17% of women in the surgical group**
- **Notably, only psychosocial variables predicted pain development.**

➤ **Does surgery facilitates the development of IBS ?**

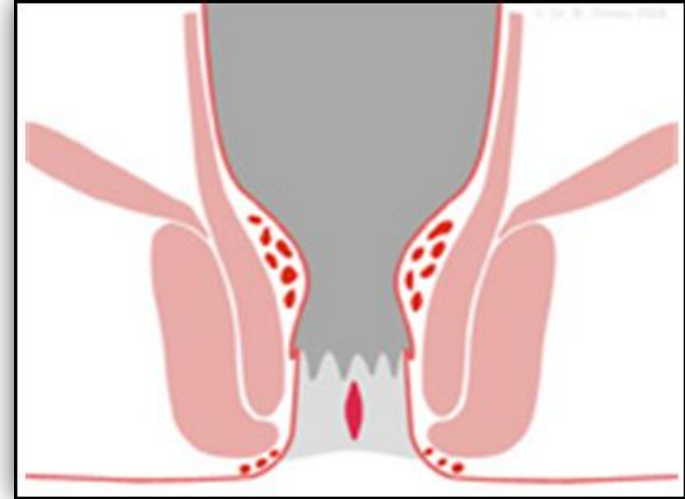
Recommendations for the management of functional anorectal pain	GR
Biofeedback treatment is recommended in patients with pelvic pain and dyssynergic defecation.	A
Offer botulinum toxin A and electrogalvanic stimulation in the chronic anal pain syndrome.	B
Offer percutaneous tibial nerve stimulation in the chronic anal pain syndrome.	B
Offer sacral neuromodulation in the chronic anal pain syndrome.	C
Offer inhaled salbutamol in the intermittent chronic anal pain syndrome.	C

Thank you for your attention!

**Interdisziplinäres
Beckenbodenzentrum**



Overlap: chronic anal fissure



- Anal fissures with features of chronicity (> 6 weeks)
- Sentinel pile, hypertrophied papillae, and exposure of internal sphincter fibers.
- Location: 72% (89% men) posterior midline, 25% (8% men) anterior midline
- About 3% of patients have both anterior and posterior fissures

Chronic Anal Fissure: Advances and Insights in functional disease Pathophysiology and Treatment

Anorectal manometry:

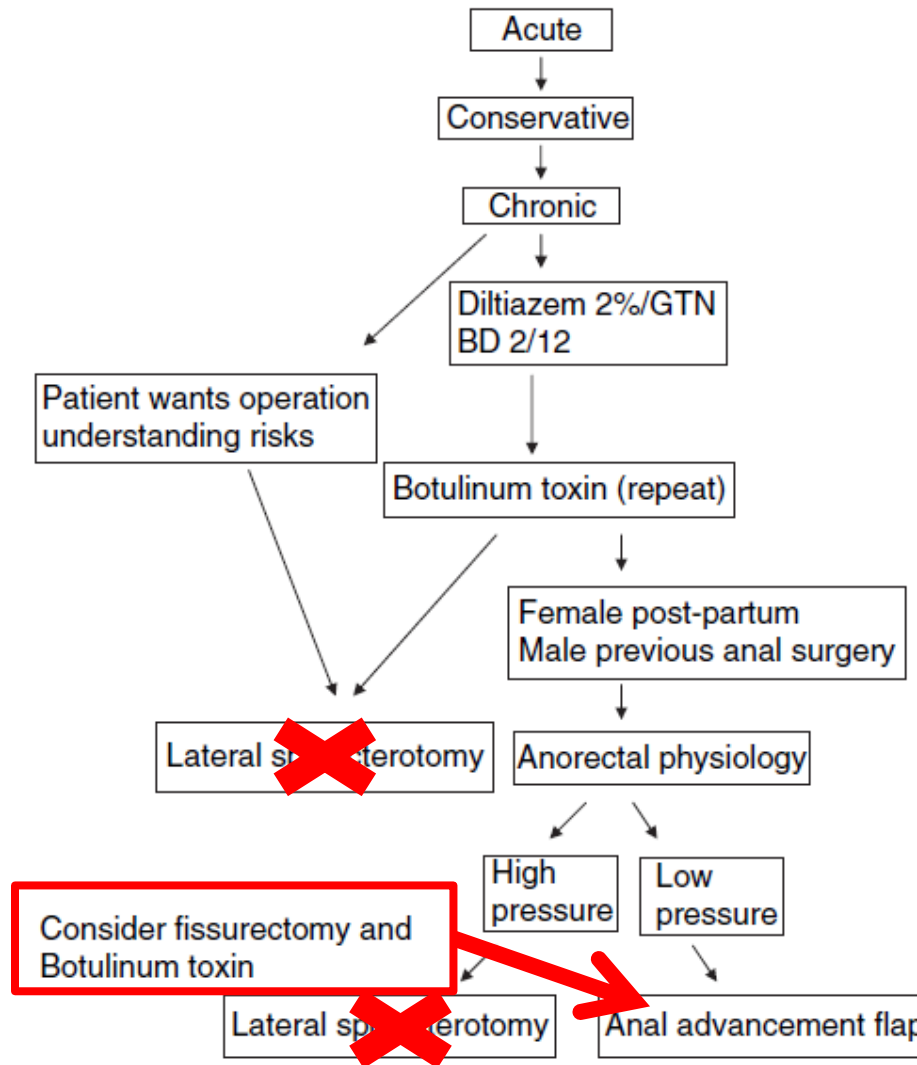
- Presence of sustained resting hypertonia, abnormally few episodes of spontaneous IAS relaxation
- Anodermal perfusion, at least in part, depends on arterioles that must cross the IAS.
- High anal pressures diminish perfusion pressure to the anoderm and lead to ischemic ulceration.

The mainstays of **surgical therapy** for fissure: anal dilatation, and internal sphincterotomy, both lead to decreased anal tone.

Each of these procedures dates to the 19th century, well before their mechanism of action could be documented.

Gastroenterology 2003

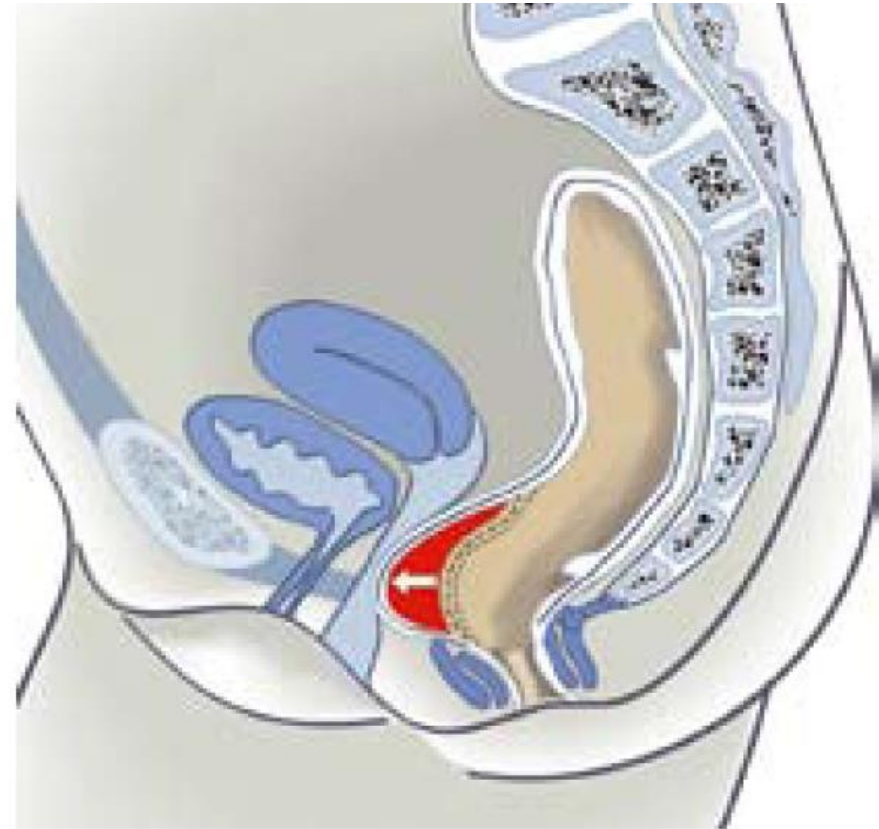
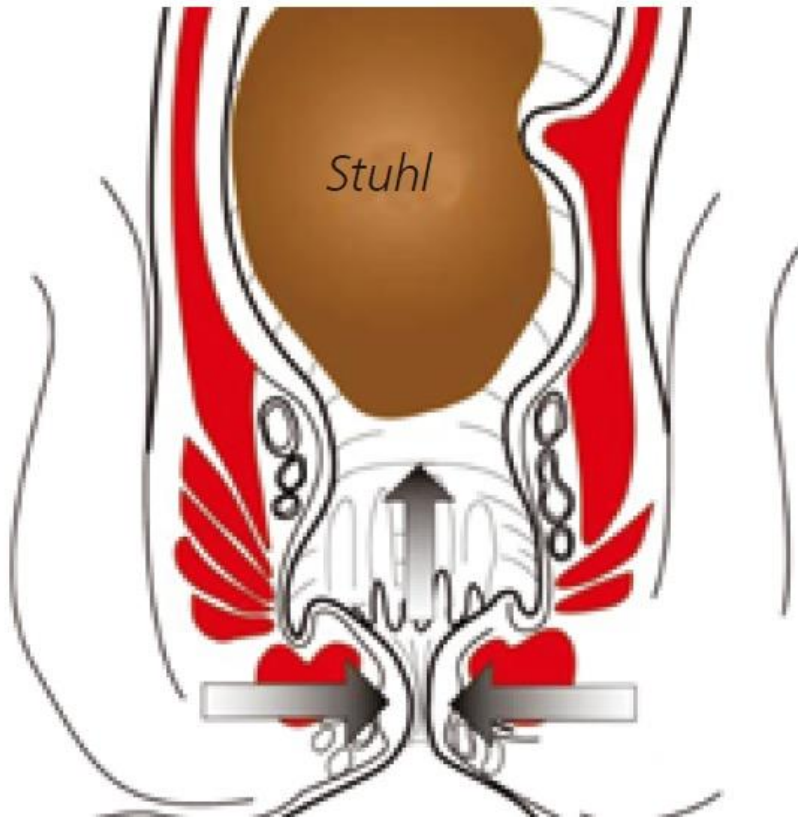
The Management of Anal Fissure: ACPGBI Position St.



Colorectal Disease 2008, 10 (Suppl.9 3), 1–7

Overlap in functional defecation disorders:

Functional constipation, dyssynergic defecation and anterior rectocele



Rome III Functional Gastrointestinal Disorders

- A Functional esophageal disorders
- B Functional gastroduodenal disorders
- C Functional bowel disorders**
- D Functional abdominal pain syndrome
- E Functional gallbladder & Sphincter of Oddi disorders
- F Functional anorectal disorders**
- G Functional disorders: neonates and toddler
- H Functional disorders: children and adolescents

Rome III Functional Gastrointestinal Disorders

C Functional bowel disorders

C1 Irritable bowel syndrome IBS

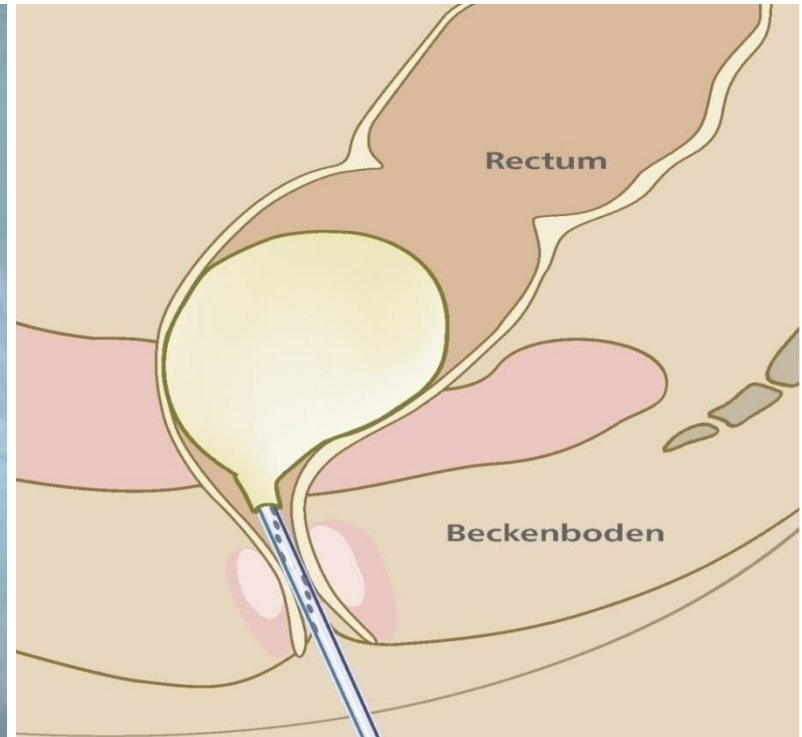
C2 Functional bloating

C3 Functional constipation

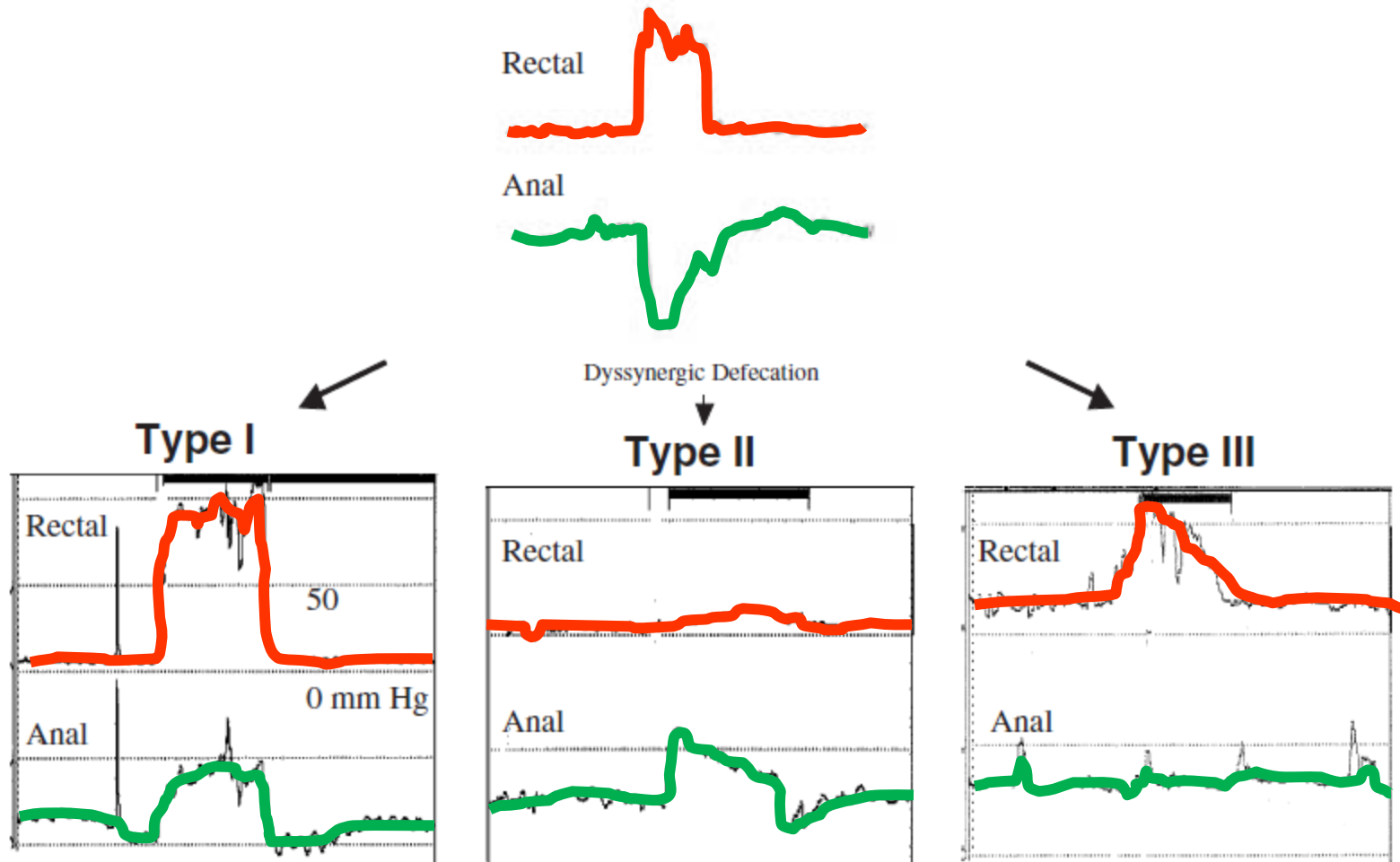
C4 Functional diarrhea

C5 Unspecified functional bowel disorder

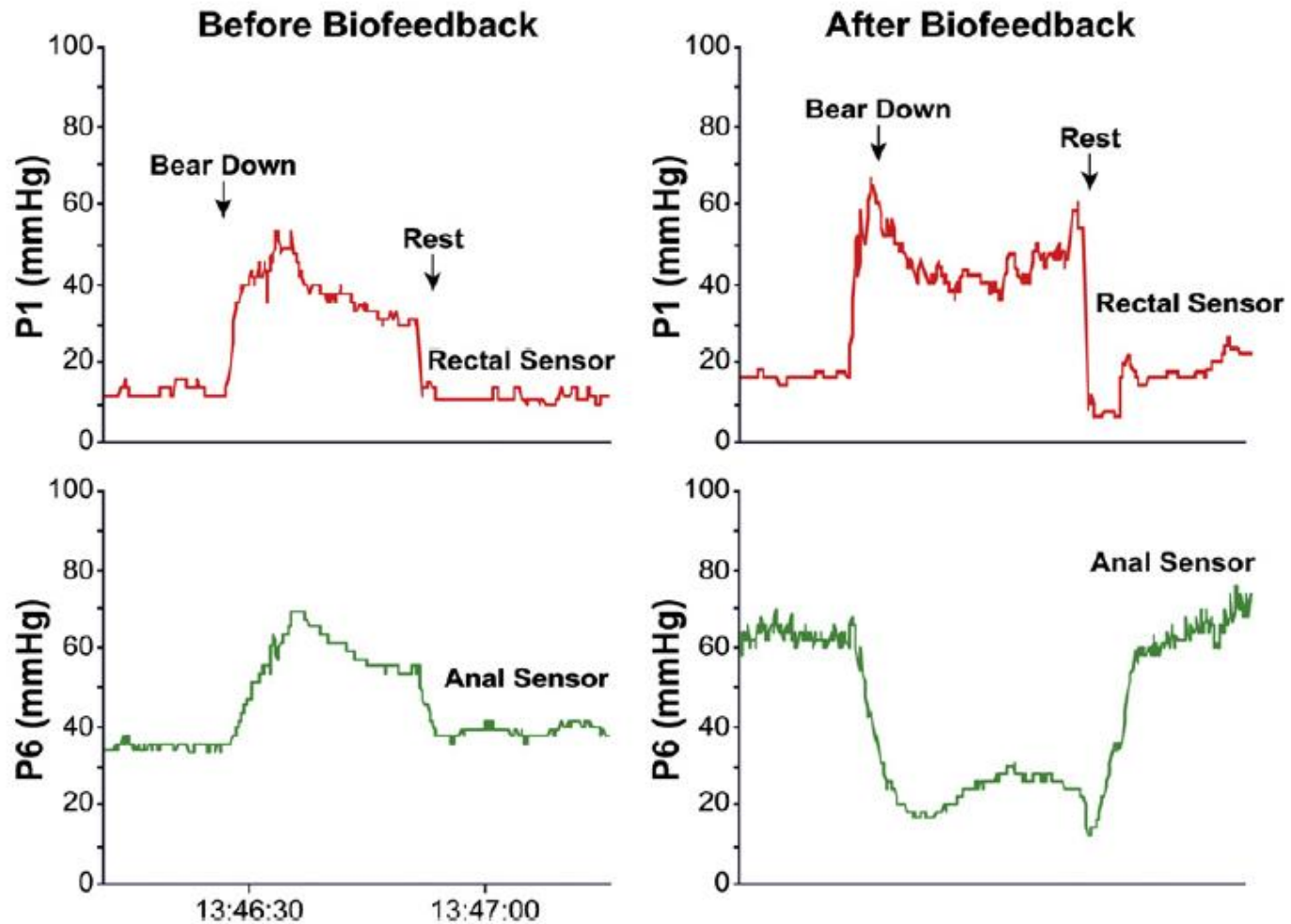
Anorectal manometry



Dyssynergic defecation I: paradoxical contraction, II: impaired propulsion and III: impaired relaxation.



Biofeedback: Dyssynergic defecation



Best Practice & Research Clinical Gastroenterology 25 (2011) 159–166

Guidelines on Chronic Pelvic Pain

D. Engeler (chairman), A.P. Baranowski, J. Borovicka,
P. Dinis-Oliveira, S. Elneil, J. Hughes, E.J. Messelink,
A. van Ophoven, Y. Reisman, A.C. de C. Williams

Conclusions on functional anorectal pain

LE

- Tenderness on traction is the main criterion of the chronic anal pain syndrome. 1a
- Biofeedback is the preferred treatment for the chronic anal pain syndrome. 1a
- Electrogalvanic stimulation is less effective than biofeedback. 1b
- Botulinum toxin is efficient in CPP with spasms. 1b
- Sacral neurostimulation is effective in pelvic pain. 3
- Inhaled salbutamol is effective in intermittent chronic anal pain syndrome. 3

Guidelines on Chronic Pelvic Pain

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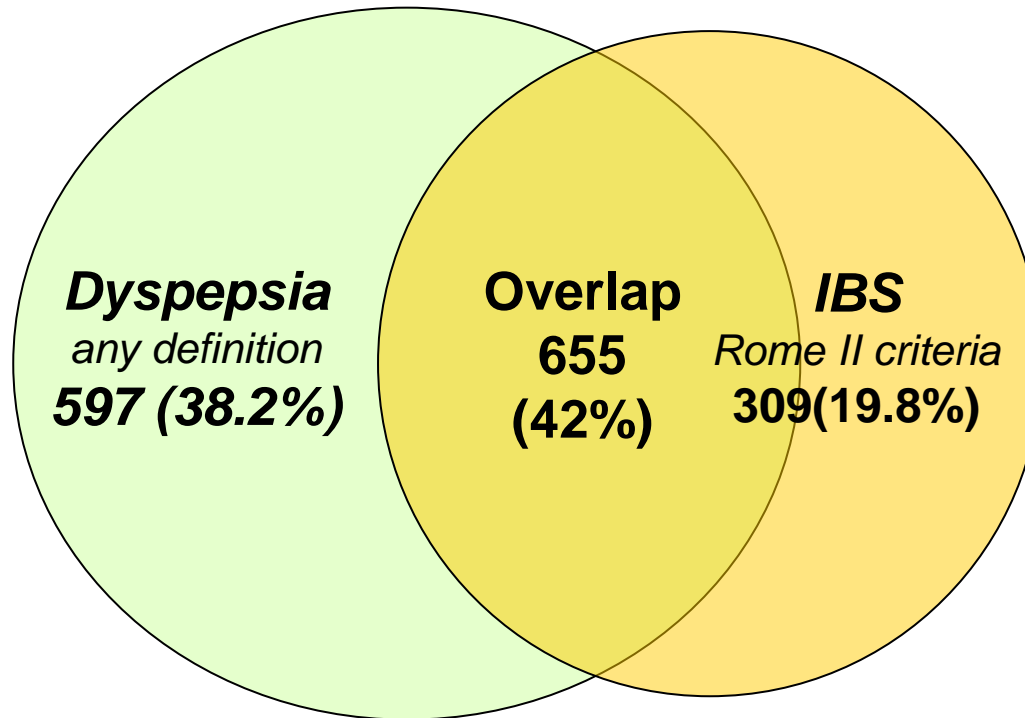
Recommendations for functional anorectal pain

GR

- Functional testing is recommended in patients with anorectal pain. **A**
- Biofeedback treatment is recommended in patients with pelvic pain and dyssynergic defecation. **A**
- Botulinum toxin and electrogalvanic stimulation can be considered in the chronic anal pain syndrome. **B**
- Sacral neuromodulation is recommended in the chronic anal pain syndrome. **C**
- Inhaled salbutamol is recommended in the intermittent chronic anal pain syndrome. **C**

Dyspepsia: 8-fold increase in prevalence of IBS

- The strength of the association suggests common pathogenesis
- Dyspeptic patients should be assessed routinely for IBS.



CLINICAL GASTROENTEROLOGY AND HEPATOLOGY 2010;8:401–409