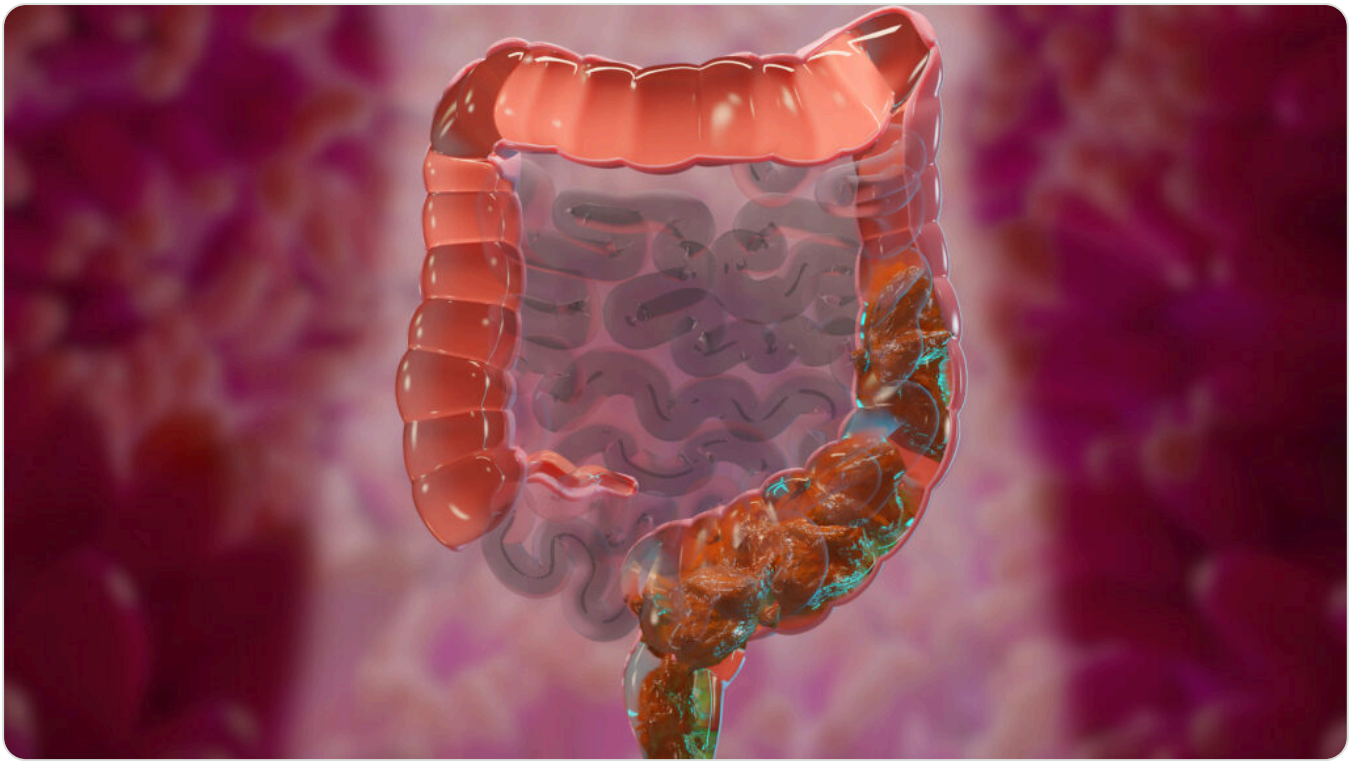

Chronic Constipation: When should the surgeon be involved? (Causes, Diagnostics, and Surgical Treatment)

Introduction: Understanding Chronic Functional Constipation (FC)

Chronic Functional Constipation (FC) is a common and complex disorder of the gastrointestinal tract that requires thorough investigation and a tailored treatment plan.

For us as surgeons, it is **crucial to understand the underlying physiological dysfunctions**. Before surgical intervention is considered, all **conservative treatment options** must be exhausted. This blog post provides you with a detailed guide to understanding, diagnosing, and treating this complex condition.

Part I: What is Chronic Constipation? The Two Main Types

Chronic constipation is defined as **persistent difficulty with bowel movements for over three months**, where structural causes (e.g., tumours or strictures) have been ruled out.

FC can primarily be divided into two main physiological types. Surgical evaluation is essential to differentiate between these:

1. Slow Transit Constipation (STC)

This is a delay in the transit of stool through the large intestine (colon). The reduced motility causes too much water to be absorbed, resulting in:

- **Hard, lumpy stools** (Bristol Stool Scale type 1-2).
- **Difficult passage.**
- **Treatment:** Often primarily medical with a focus on laxatives and, in rare cases, surgical.

2. Defecatory Disorder (Pelvic Floor Dyssynergia)

In this case, transit time is normal, but the actual evacuation at the rectum is mechanically hindered. The causes are often related to the pelvic floor or anatomical defects:

Problem	Description
Anismus	Inappropriate contraction of pelvic floor muscles (instead of relaxation) during evacuation.
Rectal Prolapse/Rectocele	Difficulty emptying due to an anatomical defect where: * The rectal wall bulges towards the vagina (**Rectocele**), or * The lower part of the bowel bulges out through the anal opening (**Rectal Prolapse**).

Part II: Specialist Investigation - From Anamnesis to Functional Tests

The investigation always starts with a thorough medical history (**anamnesis**) and a clinical examination. To establish the correct diagnosis, this is supplemented with specialised tests:

Necessary Diagnostic Tests

- **Colonoscopy:** Performed to rule out serious structural causes such as **colorectal cancer** or inflammatory bowel disease (IBD), especially if alarm symptoms are present (see below).
- **Transit Time Study (Sitz Marker Study):** Measures the bowel's transit time by the patient ingesting radiopaque markers. X-rays after 5-7 days show how many markers remain in the colon.
- **Anorectal Manometry:** Standard test for diagnosing defecatory disorders. Investigates pressure conditions and the function of pelvic floor muscles during evacuation.
- **Defecography (MRI or X-ray):** Shows the evacuation mechanism in real-time and can identify anatomical problems requiring **surgical intervention**, such as a large rectocele or rectal prolapse.

Alarm symptoms requiring immediate investigation:

Blood in the stool, unexplained weight loss, iron deficiency anaemia, or a sudden, persistent change in bowel habits (especially in patients >40 years). These symptoms must be investigated immediately for malignancy or IBD.

Part III: The Important Differentiation: FC vs. IBS-C

It is clinically crucial to distinguish **Chronic Constipation (FC)** from **Irritable Bowel Syndrome with Constipation (IBS-C)**, as the treatment strategies differ. FC is a motility disorder (movement), while IBS-C is a pain disorder.

Feature	Chronic Constipation (FC)	IBS-C (Irritable Bowel Syndrome, C-type)
Defining Symptom	Stool frequency / Consistency / Difficulty emptying.	Recurrent abdominal pain and discomfort (≥ 1 day/week).
Pain Relief	Pain is secondary to distension. **Rarely relieved after evacuation.**	Pain is a key criterion. **Typically relieved significantly after a bowel movement.**

Feature	Chronic Constipation (FC)	IBS-C (Irritable Bowel Syndrome, C-type)
Treatment Goal	Normalisation of stool transit and frequency.	Normalisation of stool *AND* control of pain (visceral hypersensitivity).

Part IV: Treatment Strategy - From Lifestyle to Surgery

The treatment of FC follows a well-defined ladder, starting with the least invasive methods.

1. Conservative Treatment (First Line)

- **Lifestyle:** Increased fibre intake (25-35g/day), adequate hydration, and physical activity.
- **Laxatives:** The foundation for treating STC.
  - *Bulk-forming:* E.g., psyllium (Husk) increases stool volume.
  - *Osmotic:* E.g., Macrogols (Movicol), Lactulose, or Magnesium Oxide draw water into the bowel and soften the stool.

2. Functional Treatment

- **Biofeedback: The most effective treatment** for defecatory disorder (pelvic floor dyssynergia). The training restores coordination between pelvic floor muscles and the rectum.
- **Secretagogues:** Specific drugs (e.g., Prucalopride or Linaclotide) that stimulate fluid secretion in the bowel. Used for severe STC where osmotic laxatives are ineffective.

3. Surgical Treatment (Third Line - Only for Severe Cases)

Surgical intervention is only indicated when medical and functional treatments have failed, and the physiological investigation has uniquely demonstrated a cause that can be resolved operatively.

- **Surgery for Anatomical Defects (Defecatory Disorder):**

- **Surgical repair** is necessary if a large **rectocele** or a **rectal prolapse** is the primary cause of the evacuation difficulty.

- **Surgery for Severe Slow Transit Constipation (STC):**
  - **Subtotal Colectomy** (removal of almost the entire large intestine) followed by **ileorectal anastomosis** (joining the small intestine to the rectum) is the most radical solution. This procedure is reserved for patients with **documented, pronounced, and treatment-resistant STC** and is not suitable if the patient also has significant IBS-C pain.
- **Sacral Neuromodulation (SNS):** Can be used to modulate bowel function but is often more effective for faecal incontinence than for constipation.

Conclusion

If your chronic constipation does not improve despite intensified conservative treatment, it is time for a specialist assessment. A thorough **investigation of chronic constipation** is necessary to uncover the precise functional cause and make the right decision regarding the next treatment steps - whether that be biofeedback, medication adjustment, or ultimately **surgical treatment of constipation** at Kirurgen.dk.

Reference List: Chronic Constipation

1. Definition, Classification, and Diagnostics (FC vs. IBS-C)

1. **Clinical Criteria (ROME IV) for Functional Constipation (FC) and IBS-C:**
   - **Source:** Drossman, D. A. (2016). Functional Gastrointestinal Disorders: History, Pathophysiology, Clinical Features and Rome IV. *Gastroenterology*, 150(6), 1262-1281.
   - **Link:** https://pubmed.ncbi.nlm.nih.gov/27144617/
   - **Supports:** The definition of chronic constipation, the differentiation between FC (motility disorder) and IBS-C (pain disorder), and the necessary criteria for diagnosis.
2. **Diagnostics of Types (STC vs. Defecatory Disorder) and Use of Tests:**
   - **Source:** Rao, S. S. C., & Patcharatrakul, T. (2020). Diagnosis and Treatment of Chronic Constipation in Adults. *Advances in Therapy*, 37(1), 1-17.

- **Link:** https://pubmed.ncbi.nlm.nih.gov/31696417/
- **Supports:** The division into STC and Defecatory Disorder, as well as the use of **Anorektal Manometry** and **Transit Time Study (Sitz Marker)** as standard diagnostic tools.

2. Treatment Strategies

3. **Conservative Treatment and Laxatives (First Line):**
   - **Source:** Bharucha, A. E., Dorn, S. P., Lembo, A. J., & Pressman, A. (2013). American Gastroenterological Association Medical Position Statement on Constipation. *Gastroenterology*, 144(1), 211-217.
   - **Link:** https://pubmed.ncbi.nlm.nih.gov/23265356/
   - **Supports:** Treatment principles focusing on lifestyle and use of laxatives (including bulk-forming and osmotic agents) as the foundation of treatment.
4. **Biofeedback as Treatment for Defecatory Disorder (Pelvic Floor Dyssynergia):**
   - **Source:** Chiarioni, G., Kim, S. M., Vohra, S., & Eusebi, L. H. (2020). Biofeedback for refractory chronic constipation. *Cochrane Database of Systematic Reviews*, 2020(9).
   - **Link:** https://pubmed.ncbi.nlm.nih.gov/32959881/
   - **Supports:** The claim that Biofeedback is the preferred and most effective treatment for Defecatory Disorder.
5. **Role and Indications for Surgical Treatment (Subtotal Colectomy):**
   - **Source:** Pemberton, J. H., & Rath, D. M. (2018). Surgical treatment of constipation. *Seminars in Colon and Rectal Surgery*, 29(1), 21-25.
   - **Link:** https://pubmed.ncbi.nlm.nih.gov/29576751/
   - **Supports:** Surgical intervention, including **Subtotal Colectomy**, as a last resort exclusively for patients with documented, treatment-resistant **Slow Transit Constipation (STC)**.
6. **Diagnostics and Surgical Treatment of Rectal Prolapse and Rectocele:**
   - **Source:** Madbouly, K., & Abbas, H. A. (2021). Surgical Management of Obstructed Defecation Syndrome: Rectocele and Rectal Prolapse. *Clinics in Colon and Rectal Surgery*, 34(3), 199-205.

- **Link:** https://pubmed.ncbi.nlm.nih.gov/34295325/
- **Supports:** The treatment of anatomical defects such as Rectocele and Rectal Prolapse, which cause evacuation difficulties and require surgical repair.

See also

Bloating · Diverticula