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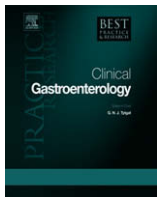

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Constipation and evacuation disorders

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Constipation and evacuation difficulty symptoms are common in the general populace. The ROME III criteria define the latter as a subset of the former. Constipation and defaecatory symptoms rarely occur in isolation and can often form part of a global pelvic floor problem, involving bladder voiding difficulties, sexual dysfunction and pain syndromes. While there is often a functional cause for symptoms, there are a number of organic causes particularly in the elderly that should not be missed. Novel physiological and imaging insights are improving our understanding, and potentially treatment, of these symptoms. Conservative therapies focus on a holistic approach in tandem with evolving drug therapies that target intestinal secretion and transit. The role of the biofeedback specialist is continually being re-defined to an all-encompassing one of physiotherapist, behavioural psychologist and moderator for alternative therapies such as rectal irrigation. Sacral neuromodulation for constipation is an emerging minimally invasive surgical option, although the criteria for patient selection are still to be elucidated. Colectomy for functional constipation is associated with a high morbidity, and gut symptoms often persist, suggesting a global GI phenomenon. Surgical correction of rectocele and intussusception for evacuation difficulty will benefit those with anatomical symptoms; for those with predominantly functional features, surgery is best avoided to prevent a vicious cycle of multiple re-operations.

The term ‘constipation’ refers to a symptom or complex of symptoms and not a specific diagnosis. It encompasses numerous non-specific gastrointestinal complaints, open to different interpretation by both physicians and patients. Figures on the incidence and prevalence of constipation and evacuation

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difficulty symptoms are therefore difficult to interpret, compounded by the continual re-definition of diagnostic criteria. Case-controlled studies are difficult when assessing patients with constipation, as these symptoms are not only commonplace but also overlapping, making it difficult to stratify groups. The ROME criteria help to standardise working definitions in an attempt to deal with this.

The causes of constipation are legions, but can be clinically classified as primary or secondary (see Table 1). Primary causes are more common and will be the focus in this article. The ROME criteria categorise these under the heading of functional gastrointestinal disorders (FGIDs), and generally these represent the greatest challenge to treatment. Secondary causes always need to be excluded at the outset, and a careful clinical history and targeted investigations are essential, as ever.

Evacuation difficulties are defined together with constipation in the ROME criteria. There are many synonyms to describe this condition, including anismus, dyschezia, non-relaxing puborectalis, dyssynergic defaecation and obstructed defaecation. The feeling of incomplete defaecation itself is an important one and can be the result of a mechanical cause for obstruction, for example, a rectocele, rectal prolapse, megarectum or Hirschsprung's disease. This feeling can also have a predominantly sensory component as in patients with tenesmus or rectal hypersensitivity, producing the need for recurrent visits to the toilet. Each symptom – incomplete emptying, difficult emptying, needing to use digital assistance – should be addressed and investigated in its own right.

There has been a gradual shift in perspectives of managing functional constipation, not only looked upon as treating individual gastrointestinal symptoms, but also the psychological ones that govern them. This new philosophy focusses on the underlying aetiopathogenesis, which often involves a complex interplay of peripheral dysmotility, altered visceral sensation and nociceptive pathways, with central factors playing a role of the initiator or modulator of all eventual functions. This is essential to avoid the cycle of repeated investigation and (often surgical) treatment that some patients seek in a desperate search for 'cure'. This article focuses on current concepts, addresses myths around the subject and details specific difficult-to-treat scenarios.

Definition

A simple classification of constipation is the infrequent defaecation; passage of hard stools, which may or may not accompany difficulty in emptying, characterised by the need to strain; the feeling of incomplete emptying and/or digital manoeuvres. The 2006 Rome III collaboration on functional disorders have further defined more formal criteria to be used in defining both functional constipation and functional defaecatory disorders. Functional constipation is defined as a bowel disorder that presents a persistently difficult, infrequent or seemingly incomplete defaecation, which does not meet IBS criteria, namely that abdominal pain is not present [1]. Functional defaecation disorders are characterised by paradoxical contraction or inadequate relaxation of the pelvic floor muscles during attempted defaecation (dyssynergic defaecation) or inadequate propulsive forces during attempted defaecation (inadequate defaecatory propulsion) [2]. The precise criteria for both functional constipation and evacuatory dysfunction are listed below in Table 2 [2]. The term 'functional' is continually being re-defined and, in the context of this review, will be considered as a bowel disorder where there is no simple single organic explanation for symptoms. The causes here are frequently multiple and include derangement in motility, sensory visceral perception and central modulation of both afferent and efferent pathways.

Epidemiology

Epidemiologic surveys on constipation and evacuation difficulties show wide variation in incidence and prevalence according to the definition used and population studied. The largest population survey in the literature suggests that one in five middle-aged apparently healthy persons have symptoms of functional constipation, and one in 10 have symptoms of obstructive defaecation [3]. Prevalence increases with age, with up to 20% of those above 65 years of age affected, being three times more common in women [4]. A hospital series of 1009 patients with severe primary constipation, some under consideration for surgery, identified normal transit in approximately two-thirds, pelvic floor dyssynergia in one-quarter, slow transit only in 13% and with both slow transit and pelvic floor