Targeted treatment for functional constipation

Idiopathic or functional constipation is a common medical problem. In the West, among elderly subjects it has a reported prevalence as high as 24%, and is more common in women.[1] Our survey in Hong Kong showed a prevalence of 14% based on the Rome II criteria.[2] Despite being such a common problem, only a minority seek medical advice and receive the proper treatment.[2] The article by Lau et al reported in this issue[3] describes a multidisciplinary approach for constipated patients with pelvic floor dyssynergy, an approach that may be worth developing by other centres treating this disorder.

Functional constipation is a heterogeneous diagnosis, usually subdivided into two subtypes, slow transit and pelvic floor dyssynergy. The underlying aetiological factors are still obscure. Slow transit constipation is due to motility abnormality, resulting from a decrease in the frequency, duration, and amplitude of the giant migrating contractions, which are also known as high-amplitude propagated contractions.[4] The gastrocolonic response is also impaired.[5,6] In addition, the associated psychosocial distress is often more severe than in constipated patients with normal bowel transit.[7] Pelvic floor dyssynergy is characterised by failure of relaxation of the puborectalis and the external anal sphincter muscles, which may even undergo paradoxical contraction during straining.[8,9] This pathology has been documented by tests of anorectal physiology.[10] The basic mechanism underlying this form of persistent constipation is the failure of the anorectal angle to straighten and the anal canal to shorten during sustained contraction of the puborectalis muscle.[11] In addition, such patients may also endure reduced relaxation of the internal anal sphincter, increased defaecatory sensation thresholds, and higher maximum rectal tolerable volumes.

Whether due to slow transit or dyssynergy, in mild cases, the treatment includes general measures like increased intake of water and dietary fibres, and use of simple laxatives. A diet with enough fibre (20-35 g each day) helps form soft, bulky stool. Sufficient dietary fibre is also needed to promote normality in bowel movement frequency over the long term.[12,13]

In severe cases however, treatment is usually directed at the underlying cause. Slow transit constipation spans a spectrum of variable severity ranging from patients who have relatively mild delays to individuals with colonic inertia or chronic megacolon at the other extreme. Most patients are treated with one or more of the available pharmacological agents. Interestingly however, Wald[14] found that dietary fibre and osmotic laxatives are generally ineffective. Moreover, no other study has demonstrated significant efficacy resulting from laxatives taken by patients with slow transit constipation, though many physicians believe that they can confer some benefit. A subtotal colectomy is effective and occasionally indicated for those afflicted by severe slow transit constipation that appears refractory to medical treatment.[15]

Initially, patients with pelvic floor dyssynergy are usually managed conservatively. However, management of chronic obstructed defaecation is often linked to frustration; a high fibre diet rarely alleviates severe symptoms and may even make them worse.[16] Biofeedback therapy can improve the function and coordination of the abdominal, rectal, and anal sphincter muscles, as well as rectal sensory perception.[17-19] Biofeedback training includes visual and/or auditory techniques, to provide input to the patient regarding their performance during attempted defaecation manoeuvres. The patient's posture and diaphragmatic breathing are also corrected using verbal reinforcement techniques.[17] Out-patient biofeedback therapy with success rates ranging from 50 to 90% have been reported,[18] and involve sessions with a dedicated therapist, during which the patient learns to appropriately relax rather than contract the pelvic floor during evacuation. Progress is monitored by either electromyographic or manometric methods; other biofeedback adjuncts include sensory retraining with an intrarectal balloon, a portable home-training unit or both.

Lau et al[3] assessed a multidisciplinary approach for patients with pelvic floor dyssynergy. Their strategy stressed the importance of education (imparting correct concepts and bowel habit training to each constipated patient), which has been a relatively ignored aspect of management. This was coupled with a change in diet, as directed by the dietitian. Unfortunately, the authors did not detail the specific diet or the amount of fibre that was recommended, or how it was tailored to the patient's medical condition. Their biofeedback training was similar to that described in other reports[19] and resulted in similar efficacy.[18,19] Despite its small sample size and lack of a control group, this study provides a basis for the treatment for the subgroup of patients with pelvic floor dyssynergy. Large scale controlled studies should nevertheless be performed to confirm or refute their observations. In addition, future interventional or local studies should focus on specifically targeting treatment to different subgroups of patients with functional constipation.

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