ANNALS OF GASTROENTEROLOGY 2004, 17(4):344-345

Editorial

Constipation: A significant and common clinical problem worthy of consideration

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Constipation is one of the most common medical problems in gastroenterology worldwide. Its significance lies not only on the high frequency of occurrance, but also on its impact on the quality of life of sufferers. It has been estimated that in the USA alone 5 million people suffer from irritable bowel syndrome with predominant symptom constipation[1] and almost 63 million people meet the Rome II criteria for constipation (estimated frequencies of constipation range from 12% to 19%).[2] It has been reported that after a follow-up of 14.7 months, 89% of patients were still complaining of constipation.[2] Nevertheless it is generally accepted that the prevalence of constipation has been stable because the onset and disappearance rates over time are similar. Approximately one third of those individuals with constipation seek health care; this is an expensive fraction due to investigational and medication costs.[3]

Constipation usually refers to persistent, difficult, infrequent, or incomplete defecation. The list of causes of constipation is extremely long and includes secondary causes as well as idiopathic disorders, relating either to impairment of colonic transit or to structural or functional obstruction to fecal evacuation. Patients with idiopathic slow-transit constipation comprise a small proportion of the total number of patients complaining of constipation and can be divided into two subgroups: 1) patients with normal proximal gastrointestinal motility with onset of constipation with childbirth and 2) patients with a dysfunctional enteric nervous/neuroendocrine system who exhibit colonic dysmotility as a part of a generalized dysmotility.[4] The evidence that life-style factors are causally linked to constipation is weak, although non steroidal anti-inflammatory drug use and the use of other constipation-inducing medications are important risk factors. Although hemorroids have been attributed to constipation, this association has been questioned.

The evaluation of patients includes a carefully obtained medical history and physical examination, estimation of simple hematological parameters and colonoscopy or flexible sigmoidoscopy. The role of imaging of the posterior pelvic floor is increasing considerably. Evacuation proctography is quite useful for the estimation of possible rectal voiding and prollapse, while endoluminal imaging is important in the management of anal incontinence.[5] The use of magnetic resonance imaging is under evaluation.

The estimation of anorectal physiology as assessed by manometry and other techniques can also provide useful information in the management of patients with constipation. The value of anorectal manometry is still quite important, especially for the exclusion of Hirschsprung disease.[6] These techniques can measure resting anal canal pressure, and anal canal squeeze pressure, rectoanal inhibitory reflex, anal canal pressure in response to cough and defecatory maneuvers and sensory thresholds in response to balloon distention.[7] However, the clinical utility of anorectal manometric tests is limited by the relative absence of standardization of test protocols and data derived from normal people.

Most patients are successfully treated without the need for specialized and costly investigation, by implementing simple modifications in diet and life-style. In a minority of patients, special investigation is required, leading to a more specialized form of therapy. Bowel retraining, biofeedback therapy, drugs, and, rarely, surgery,

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may be required. Laxatives are among the most commonly used drugs in the world.[8] Most of them are quite safe when used judiciously, intermittently when possible. Polyethylene glycol solutions are emerging as an effective and safe mode of treatment for chronic constipation. The link between laxatives and cathartic colon or enteric nerve damage has not been confirmed.[9] Senna compounds and bisacodyl are the most frequently described drugs. Although there is data supporting a neoplastic potential of these drugs in *in vitro* studies, epidemiologic data in humans so far have not established a clear relationship between this kind of laxative and colonic neoplasia.[10] Tegaserod, a drug belonging to a new class of compounds (aminoquanidine indoles) with structural similarities to serotonin, has a stimulatory effect on gastrointestinal motility in both animals and man, acting as a selective inhibitor of 5-HT(4) receptor. It is currently approved by the FDA for the treatment of women with constipation-predominant irritable bowel syndrome. Eight large Phase III clinical trials involving >5000 IBS patients support the clinical efficacy of tegaserod in this group of patients.[10]

Biofeedback treatment may be viewed as a valuable adjunct to medical management of functional constipation and incontinence. The reported overall average probability of successful treatment outcome for patients treated with biofeedback was 62% for constipation.[11]

Patients with central neurological disorders present a special problem. The management of constipation of these patients remains empirical. Mechanical evacuation may be more effective than oral or rectal medication.[12]

The role of different types of fiber in irritable bowel syndrome patients with constipation seems to be favourable, although no effect on the level of pain accompanying the IBS has been observed.[13]

Surgery for constipation is mainly related to the management of idiopathic megacolon, although pelvic outlet obstruction and perianal herniation may also require surgical intervention. The suggested surgical management of megacolon today is subtotal colectomy with preservation of the ileocecal valve. The long-term outcome of this procedure is considered to be quite favourable.[14] However, secondary morbidity is considerable.[15]

Thus, constipation still remains one of the most important problems related to clinical gastroenterology, the annual cost for diagnosis and treatment of which is extremely high worldwide.

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