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Editorial

Bowel Habits – Normal or Functional?

D Nyam

Functional bowel disease is often used as a wastepaper basket term for any condition when we are unable to pinpoint a specific organic or mucosal lesion in the GI tract. The same symptomology of constipation, diarrhoea and the pain-gas-bloat complex can be end manifestations of multiple etiologies which are often multidimensional as well. Developments in GI physiology recently has shed new light in the understanding of normal GI motility[1]. With a better understanding of the process of motility, GI neurophysiology and anorectal physiology, factors associated with functional bowel diseases can be now defined, and subsequently a more logical approach to its management outlined.

As physicians we are constantly faced with the dilemma of differentiating what is normal and what is abnormal. This is compounded by the fact that humans function within a "range of normality". We have in the past been relying on data from the West as reference ranges for normality because data of "normal" bowel function for Asians was lacking. The study in this issue by Chen and Ho[2], is a good attempt, albeit on a small sample population, to determine what is the "normal" range of bowel movements in Singaporeans. Although not drawing any surprises, it is still important to know that the range of normal bowel movements is not different from what is established in the Western literature[3].

While frequency of bowel movements is one simple and direct indication of bowel function, it is not the absolute number of calls to stool that is answered each day that is important but the fact that this is usually done with some form of individual pattern and regularity. Thus, a change from the normal pattern is more critical. Consequently, if someone has been passing three times per day all his life is now passing once a day, it is far from normal. On the other hand, if the normal habit was twice per week and now once a day, it is also abnormal. Both these senarios, thus require investigations. In addition, frequency is but one aspect of bowel movement. The consistency, volume, calibre and the presence of blood or mucus are also important aspects that need to be considered.

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A diagnosis of functional bowel disorder or irritable bowel syndrome (lBS) with the use of Manning's criteria can be a useful positive proactive approach to raise the suspicion of lBS[4,5]. Once the criteria is satisfied, one can subclassify lBS into diarrhoea predominant, constipation predominant or the pain-gas-bloat predominant. This is useful in allocating management protocols for these specific groups. Symptoms limited to one area of the gastrointestinal tract have over time been reallocated into specific functional disorders. These include globus, heartburn, non-ulcer dyspepsia and proctalgia fugax.

Since by definition, the irritable gut has no known pathophysiology there is no X-ray, blood test or other measurement that will reliably confirm any of its syndromes. The medical and social history are principal and indeed, the only instrument of diagnosis. A clinical history should be obtained specifically targeting the positive identification of "alarm symptoms". A physical exam provides valuable backup, as physical abnormalities may indicate other diseases. This should include a full rectal examination. The absence of rectal bleeding is helpful in excluding organic diseases[6]. In addition to bowel symptoms, systemic symptoms are often provide valuable clues that something is amiss. These include amongst others anorexia, unexplained loss of weight and anemia.

To avoid unnecessary, costly and potentially dangerous investigations in patients with suspected lBS, it is important to use relatively inexpensive "screening" tools and interface these with therapeutic trials in the management process. Tests are done to reassure the physician and patient that no organic lesions coexist. Depending upon circumstances such as age and sex of the patient, country of origin, family history and so on, additional tests may be required but common sense should always prevail.

To avoid unnecessary, costly and potentially dangerous investigations in patients with suspected lBS, it is important to use relatively inexpensive "screening" tools and interface these with therapeutic trials in the management process.

Diarrhoea predominant IBS

A limited series of investigations is necessary to exclude organic, structural, metabiotic and infectious disease. These may include

1. Stool examination for occult blood, ova, cyst and parasites
2. Flexible Sigmoidoscopy
3. Barium Enema or Colonoscopy in those with a first degree relative with polyps or cancer.

An abnormal haemoglobin or mean cell volume, potassium, calcium or albumin should trigger one to think about malabsorbtion or a secretory type diarrhoea, Mucosal lesions or colitis should be treated on their own merits.

Constipation predominant IBS

Provided there are no alarm symptoms present, the first line approach is a trial of fibre and fluids. A recent local survey showed that most Singaporeans take on average less than 1.5 to 2.0 L/day of fluids. Increasing fibre intake alone without a concomitant increase in fluid intake usually results in a worsening of the constipation. The therapeutic trial would usually allow those with more severe functional constipation to be identified for further evaluation. It is important to rule out a mucosal lesion with a barium enema or a colonoscopy. The presence of mucus or blood in the stools should prompt one to investigate the colon at an earlier stage as these are common presentations of a large adenoma or a cancer. Other structural causes of "complicated chronic constipation" can be easily evaluated with a combination of a simple transit marker study and a defecating

proctogram[7]. Importantly, these two tests enables one to identify correctable causes which include occult and full thickness rectal prolapses, pathological rectoceles, pelvic floor dysfunction (also called puborectalis paradox or anismus[8]), megarectum, adult onset Hirschsprung's disease and the descending perineum syndrome[9].

Pain-Gas-Bloating Complex

These symptoms point toward upper gastrointestinal dysfunction and may occasionally be associated with nausea. Frequently, patients require reassurance that problems such as peptic ulcer disease and cholelithiasis do not exists. If so these subjects may be investigated with an upper gastrointestinal endoscopy and ultrasound of the hepatobiliary system.

Once organic, structural and biochemical disorders are excluded, it is useful to actively reassure the patient of the negative results of these tests and the importance of these normal findings. The symptoms can then be managed medically in a logical step wise algorithm. SMJ

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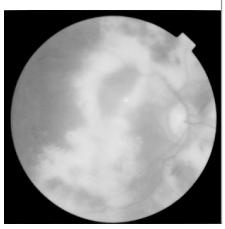
Cover Picture: Severe diabetic maculopathy/ diabetic macular oedema (Right eye) *(Refer to pages 295-297)*



ERRATUM

The sequence of authors cited for "A Review of Offenders Remanded in a State Psychiatric Hospital" published in Volume 41 Issue 3, March 2000 should be L E C Lim, K L Chan, L L Tan, M Sung, M I Loh, P T Straughan.