IRRITABLE BOWEL SYNDROME

HAMEED AHMAD

Department of Medicine,

Postgraduate Medical Institute,

Lady Reading Hospital, Peshawar.

DEFINITION

Variable combination of chronic or recurrent gastrointestinal symptoms not explained by structural or by chemical abnormalities. They may include symptoms attributable to the oropharynx, oesophagus, stomach, biliary tree, small or large intestine or anus. It has been suggested that irritable bowel syndrome (IBS) and functional dyspesia represent the same disease entity, the irritable gut[1]

A functional gastrointestinal disorder with symptoms attributable to mid or lower intestinal tract. The symptoms include abdominal pain, bloating or distension and various symptoms, disorders of defecation.

An international working team defined the irritable bowel syndrome as distinct from other functional bowel disorders. Symptoms criteria for irritable bowel syndrome are known as the Rome Criteria. Since there is no pathophysiological marker for any of these syndromes, we must rely on symptoms for their definition and classification. The Rome criteria is a step towards better understanding of functional gastrointestinal problems because the disparate syndromes are likely to have different causes and treatment.[2] (Table – I)

PREVALENCE

IBS is probably the most common condition seen by Gastroenterologists in UK and USA. Studies in UK., USA., France, New Zealand and China indicate that IBS is present in 11-14% of adults. Although most patients with IBS do not consult a physician. 60-80% of patients seen in Gastroenterology clinics are those with functional bowel disease. IBS and ulcer dyspepsia overlap each other.[3]

PATHOGENESIS/ PATHOPHYSIOLOGY

Despite much research we cannot offer a convincing explanation to the cause of IBS. "Is it a motility disorder due to altered perception, a psychological disorder, a psychophysiological phenomenon or dietary disorder or even abnormal illness behaviour. Is the IBS a qualitative or merely quantitative departure from the psychophysiologic reactions of normal people?" Thomas Almy, 1980.[2]

1. Abnormal Motility:

"The bowels can be constipated, yet loose or dysenteric in the same person. How the disease has two such different symptoms, I do not profess to explain" W. Cunning (London Medical Gazz.)[1]

Motility studies has consistently shown exaggerated colonic motor response to various stimuli including food, parasympathetic drugs and bile acids.[4]

In a series of experiments, balloon inflated sequentially throughout the gut

TABLE – I

SYMPTOMS CRITERIA (ROME) FOR IBS SYNDROME

At least 3 months continuous or recurrent symptoms of:

a. Abdominal pain, discomfort or distension relieved by defecation or associated with change in frequency of stool or associated with change in consistency of stools.

b. Two or more of the following at quarter of occasion:

- altered stool frequency
- altered stool form
- altered stool passage
- Passage of mucus
- Bloating or feeling of abdominal distension.

identified trigger points that reproduced abnormal pain in most cases of irritable bowel syndrome.[5]

Abnormal motility has also been described in the bladder of patients with Irritable Bowel Syndrome.

2. Perception Disorder

" A normal perception of abnormal motility or an abnormal perception of normal motility" M.J. Ford, 1986.

To what extent the pain of IBS is a normal perception of abnormal physiology or abnormal perception of normal motility? In IBS there is a tendency for both small and large bowel to over-react to various stimuli such as stress, drugs, balloon distension and even eating. Altered rectal perception is present in almost all patients with IBS and perception thresholds correlate with temporal changes in retrospective symptoms severity, altered rectal perception represents a reliable biological marker of IBS.[6]

3. Dietary factors

" Eat what you want and let the food fight it out inside" -Mark Twain.

In 1972 a study of rural African and Westernised population the greater the dietry fibre content, the greater the daily stool weight and the shorter the whole-gut transit time and this was called fibre hypothesis.[7]

Food intolerance accounts for 35% of patients with IBS who have predominantly diarrhoea. They may find that symptom precipitated by certain foods.

The chemistry of food is complex, and it is becoming clear that there are many sugars within certain vegetables which are poorly absorbed. The best examples are fructose and sorbitol, both of which can cause diarrhoea. Malabsorbed material traps fluid within the small bowel producing symptoms of bloating and colic. When fermented within the colon produces excessive flatulence and abdominal pain. Such a phenomenon may underlie the response of nearly half of the patients to an exclusion diet consisting of one meat, one source of carbohydrate, and one fruit. "Most patients whose symptoms resolved on such a diet were able to identify one to five foods, most commonly dairy and meat products, that reproduced their symptoms when reintroduced into their diet.

4. Post-gastroentritis:

Upto 25% of patients with IBS date the onset from an episode of gastroentritis. This subgroup has a better prognosis.[8]

5. Fibre intake:

Fibre hypothesis of Dennis Burkettis the greater the fibre content the greater the daily stool weight, shorter the whole gut transit time. The concept that many diseases of colon and other organs including IBS results from ingestion of Western

refined low fibre diet. How for it is true in our dietry habit is not known?

6. A psychological disorder/ psycho-physiological disorder:

Many studies attest to the fact that anxiety, mental depression and other types of psychological distresses are more likely in IBS patients than in those with organic disease.[9]

A person with IBS who has ignored the symptoms for years may become acutely aware of them when a close relative die. Emotion affects gut, stressful situation affect people in different ways. One may have strange feelings in the tummy, another diarrhoea another vomiting.

7. A behaviour disorder:

People with IBS are prone to chronic illness behaviour and that this is learnt as abnormal behaviour.[10]

THERAPEUTIC APPROACHES

It should be based on 5 principles.

1. Positive diagnosis: after taking detail history and physical examination a positive clinical diagnosis of IBS. should be made. Many consider IBS. as a diagnosis of exclusion, this approach is expensive.[11]

   A condition which affects 14% of population organic disease is bound to coexist in some. The first step is to inquire about the symptoms that suggest organic disorder such as anaemia, bleeding, fever, weight loss or recent change in bowel habit. If such findings are absent fewer investigations should be ordered.

2. Patient's apprehension: If there is an unfound fear of serious disorder, it should be met with firm reassurance. Threatening life events should be discussed, some patient may require psychological help.[12]

3. Anxiety and depression be treated on their own merit. Explanation and reassurance are fundamental in the treatment of this condition; one must gain their confidence by showing that they have a genuine problem.

4. Emotionally disturbed patients benefit from regular brief visits. These serve to reassure and control "doctor shopping" with inappropriate ordering of tests and treatment. If the physician seems to lose the confidence of a patient, referral to a colleague may help by confirming the diagnosis and reinforcing the management plan.

5. Graded therapeutic response: The primary care physician must emphasis the positive diagnosis, the chronic yet benign nature of the symptoms, the role of stress, and the ineffectiveness of drugs. Bulk (eg bran) improves constipation and is otherwise a safe, cheap placebo. For non-responders, once the above items have been dealt with satisfactorily, supportive psychotherapy and drugs for specific indications may be added. Over-investigation or repeated testing without substantial indication undermines the patient's confidence in doctor's conclusions.[13]

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