

SY No. / 1

STUDY OF IRRITABLE BOWEL SYNDROME IN ELDERLY PATIENTS

THESIS

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TO MY PARENTS



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INTRODUCTION

Irritable Bowel Syndrome (I.B.S.)

Irritable Bowel Syndrome (I.B.S) is one of the most common gastrointestinal diseases in clinical practice. Although it is said to be rare in the elderly patients, yet the recent publications indicate that the syndrome is not uncommon in this group of patients. (Holmes and Salter, 1982). The irritable bowel syndrome is a functional bowel disorder manifested as a chronic or recurrent dysfunction of the gut at times of life stress or emotional tension. It represents a disturbed state of motility which may involve the entire G.I.T and no organic cause can be found. The condition is the commonest digestive disorder in clinical practice "more than 50% of all digestive troubles." It affects all different age groups but adolescent and children can suffer in some hidden forms. Women suffer more than men (3:1) and race is not different. There are three main features which are essential for accurate diagnosis.

- 1) Altered bowel habits.
- 2) Abdominal pain.
- 3) absence of any detectable organic lesion.

Symptoms: There are different degrees of variability in severity, duration and precipitating factors. The best classification of symptoms are:-

- 1) main presenting symptoms e.g. abdominal pain, altered bowel habits and altered stool characters.
- 2) Other digestive symptoms e.g. flatulence, post prandial epigastric fullness or discomfort, heartburn and regurgitation of stomach contents.
- 3) Associated systemic symptoms often related to vasomotor autonomic lability and anxiety as: excessive flushing, palpitation, weakness, lethargy, headache and cancer phobia.

Signs: Very few, non specific, rigid rope-like or cord-like colon may be palpated.

Aetiology: The most important aetiological factors are psychic troubles and emotional stresses, also diet and drugs and recently lactase deficiency may play a role.

Diagnosis: Is essentially done by exclusion of any other organic lesion of the colon, by proper detailed history, physical examination, stool analysis for occult blood and parasites, complete blood picture, sigmoidoscopy and biopsy, barium enema and psychiatric assessment by different psychometric scales.

Differential diagnosis: Some other organic diseases have to be differentiated from irritable bowel syndrome which

are: cancer colon, ulcerative colitis, diverticular diseases of the colon, malabsorption states and some gynecologic disorders.

Treatment: the main lines of treatment are:

A) General lines:

- 1- Reassurance of the patients and advising changes in their routine life and some exercises
- 2- Gradual increase in the Quantity of dietary fibers may help to reduce the clinical symptoms during exacerbations.

B) Drugs: The best is a combination of a bulking agent (as bran), antispasmodic as (probantheline, mebeverine) and a psychotropic (sedative and, or antidepressant). Also, we should control the altered bowel by using either laxatives or antidiarrheals.

AIM OF THE WORK

Irritable bowel syndrome (IBS) reportedly accounts for half of the gastrointestinal complaints brought to the attention of physicians and ranks second as a cause of industrial absenteeism due to illness. Despite numerous investigations, no organic cause for this syndrome has been discovered (Young et al 1976).

We have been impressed as well as others by the increased number of the elderly patients suffering from the irritable bowel syndrome during the recent years. Such increase may be a real increase in the patient number suffering from the syndrome, due to increase in stresses of life or may be due to better improvement in the diagnosis or both. Unfortunately despite of the definite increase of the IBS in elderly patients, we pay more attention to the increased incidence of some serious diseases e.g. diverticulosis and cancer colon and ignore IBS. Recently many authors were impressed by the great difference in symptoms pattern especially the psychological symptoms in elderly patients than the younger group (Swarbrick et al., 1980).

It is the aim of this study is to compare the clinical manifestations of the irritable bowel syndrome in the elderly patients (above 60 years) with the pattern seen in young adult patients (below age of 40 years).

PART I

**ANATOMY AND PHYSIOLOGY OF THE
LARGE BOWEL**

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PART I

The Large Bowel

A) Anatomy: Romanes (1972):-

The large intestine extends from the right iliac fossa to the perineum, and surrounds the centrally placed small intestine. It is much shorter (1.5 meters) than the small intestine, and also decreases in diameter from the caecum to the descending colon, but all parts of it are capable of considerable distension. The parts of the large intestine are: the caecum and vermiform appendix, the ascending, transverse and descending parts of the colon joined by the right and left flexures, the sigmoid colon; the rectum and the anal canal.

Caecum:

This is the blind end of the large intestine in the right iliac fossa. It is approximately (5-7 cm) in length and width. Superiorly it joins the ascending colon and terminal ileum. It lies on the iliopsoas muscle and on the nerves (genitofemoral, femoral and lateral cutaneous nerve of the thigh), on arteries (testicular or ovarian) and on its surface, and frequently overlaps the external iliac artery.

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It is a relatively mobile organ which may lie in the lesser pelvis. It is almost completely surrounded by peritoneum, but it is often attached to the peritoneum of the iliac fossa laterally and medially.

Vermiform Appendix:

It is attached to the postero-medial surface of the caecum, (2-3 Cm), infero-lateral to the ileocaecal junction. It is a blind tube of very variable length (5-15 Cm, more or less) and about 5 mm in diameter. Structurally it has the same peritoneal and muscle coats as the small intestine. The lumen is very narrow and is easily blocked by inflammations.

Vessels and Nerves:

The caecum and appendix are supplied by branches of the ileocolic artery. Their lymph vessels pass to nodes in the mesentery of the appendix and scattered along the ileocolic artery up to the duodenum. The nerves pass along the branches of the ileocolic artery from the superior mesenteric plexus.

Ascending colon:

It is (12-20Cm) long, it begins at the level of the entry of the ileum in the right iliac fossa, on

the anterior surface of the iliacus. It ascends over the iliac crest and the quadratus lumborum in the paravertebral gutter. It ends on the anterior surface of the inferior part of the right kidney posterior to the liver. Here it turns sharply to the left, and forms the right flexure which is continuous with the transverse colon.

Vessels and Nerves:- The ascending colon and the right flexure are supplied by the ileocolic and right colic arteries, along which run the nerves from the superior mesenteric plexus. The lymph vessels end in nodes on the medial side of the colon and along its vessels.

Transverse colon:

This is usually the longest (40-50 Cm) and most mobile part of the colon. It begins at the right flexure, and suspended by the transverse mesocolon, arches across the abdomen with its convexity antero-inferiorly. It ends in the left flexure. If the intestines are distended, it may be pushed superiorly either posterior or anterior to the stomach. The left flexure lies at a slightly higher level; is more acute and further lateral than the right flexure.

Vessels and Nerves: The transverse colon is mainly supplied by the middle colic vessels, but its extremities and the corresponding flexures are supplied by the right and left colic vessels. The nerves accompany the arteries from the superior and inferior mesenteric plexuses. In addition to the sympathetic fibers which both plexuses contain, the former carries a number of vagal fibers, while the latter transmits pelvic parasympathetic fibers. The lymph nodes lie in the mesocolon along the blood vessels.

Descending Colon:

The descending colon (30 Cm) passes inferiorly from the left flexure to the margin of the superior aperture of the lesser pelvis. It is attached by the peritoneum to the posterior abdominal wall in the left paravertebral gutter and iliac fossa. It is characterized by having the narrowest lumen of the large intestine and has the thickest muscle coat, so, it is in the left lower abdominal quadrant that spasm in an IBS can be the most distressing.

Vessels and Nerves: The blood supply is by the left colic and upper sigmoid branches of the