

## Reminder of Important Clinical Lesson: Irritable Bowel Syndrome in Primary Care Physicians

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### ABSTRACT

Irritable bowel syndrome (IBS) is one of the most commonly diagnosed gastrointestinal diseases. IBS, in the absence of any other causative disease, is defined as the presence of abdominal pain or discomfort with altered bowel habits. The etiology of IBS is broad and not clearly understood. Nearly 12 percent of patients seek medical care in primary care practices for IBS related complaints. The pathophysiology of IBS is broad and includes abnormalities involving motility, visceral sensation, brain-gut interaction, and psychosocial distress. The clinical case presented has the textual characteristics that represent treating a patient with diagnostic criteria for this pathology. Presenting prevalent cases helps the physician in training and specialists not to overlook what is common in clinical practice.

**KEYWORDS:** Irritable bowel syndrome, Pathogenesis, Diagnosis, Treatment, Evidence-based medicine.

### ARTICLE DETAILS

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### CASE PRESENTATION

A 29-year-old woman came to the emergency room with previous outpatient visits to general medicine; she required admission to the chronic medicine program from family physicians and internal medicine. She has a history of two evaluation opportunities for general surgery for non-surgical abdominal emergencies. It is understood that the patient was actually complaining of abdominal distension and colic-like pain in the abdomen, and changes in defecation habits during the last four months of evolution.

Patient under psychological follow-up due to the description of worsening of her abdominal clinical condition during periods of stress in her work days or family situations. She has no relationship with particular foods, no intolerance to dairy or wheat, no abdominal masses. During the physical

examination there was no pathological description of any type of sign or symptom. There is no abdominal protection but there is slight abdominal hypersensitivity.

She performed negative infectious serological tests for HIV/Syphilis/Herpes and celiac disease was ruled out (She has two negative serological results of (tTG, DGP, total IgA). Negative stool cultures and examinations for bacterial or parasitic infections. She has a colonoscopy that does not reveal any noticeable changes or data.

She was evaluated by gastroenterology which confirmed the primary diagnosis of irritable bowel syndrome (mixed diarrhea and constipation) with repeated tests. After 7 months of medical treatment and clinical monitoring. Nowadays she has a better quality of life. **Diagnosis:** Irritable bowel syndrome (IBS)

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### INTRODUCTION

Irritable bowel syndrome (IBS) is a highly prevalent, chronic and sometimes disabling gastrointestinal disorder of gut–brain interaction (1,2). It is characterised by disordered defaecation and recurrent abdominal pain (2,4). IBS can start after a bout of gastroenteritis or antibiotic use, though there is often no clear origin (2,3). The IBS is a prevalent disorder that greatly reduces patients' quality of life and adversely affects the medical economy (1,2). A recent epidemiological survey using the Rome IV criteria revealed that the prevalence of IBS in the general population globally is 4.1% (3,4).

### GENERAL ADVICE

1. Irritable Bowel Syndrome likely represents the represent the clinical expression of multiple potential pathophysiologic factors, including a genetic predisposition to the disease, disturbed Central nervous system pain processing, visceral hypersensitivity, mucosal inflammation, abnormal colonic motility, and emotional stress (2,3).
2. Anxiety disorders, somatoform disorders, and history of physical or sexual abuse have been identified in 42% to 61% of patient's whit IBS referred to gastroenterologists (3,4).

### DIAGNOSIS

1. Rome IV criteria are useful for the diagnosis of irritable bowel syndrome (IBS) (2,4). Colonoscopy is useful for the differential diagnosis of IBS from other organic diseases. Histopathological examination of the gut mucosa is useful for differential diagnosis or identifying refractory IBS (2,5).
2. We propose colonoscopy for the diagnosis of (IBS). Upper gastrointestinal endoscopy, radiography, and specimen examination (blood, urine, and feces) are useful for differential diagnosis of IBS from organic diseases (2,6).
3. Laboratory tests are useful during the clinical course of IBS. Laboratory tests other than colonoscopy would not have sufficient diagnostic accuracy to identify IBS in routine use. However, because some tests can differentiate IBS from non-IBS with reasonable diagnostic accuracy, we propose these tests for the diagnosis of IBS (2,7).

### Clinical Characteristics and Treatment of Irritable Bowel Syndrome in a Colombian Population:

The present study (A Cross-Sectional Study) describes the clinical and treatment characteristics of IBS in a group of Colombian patients (8). The predominant type of IBS reported by the physician was unclassified IBS (81.8%), followed by IBS with diarrhea (8,9). It was found that IBS occurs more frequently in women, consistent with findings

from previous studies. Unclassified IBS was slightly more common in women (8,10).

IBS with diarrhea was more frequent in men. The most common symptoms were abdominal pain, bloating, and diarrhea (8). None of the physicians explicitly recorded or mentioned the Rome IV criteria in the medical records (8,9). The most common comorbidity was arterial hypertension (14.2%), followed by dyslipidemia and dyspepsia. Similarly, the most common comedications were angiotensin II receptor antagonists, antidiabetics, and lipid-lowering drugs (8,11).

### New insights into irritable bowel syndrome pathophysiological mechanisms:

The (IBS) is a disorder of gut–brain interaction characterized by recurrent abdominal pain associated with defecation or change in bowel habits (12). According to ROME IV criteria, four IBS subgroups are identified: IBS with diarrhoea (IBS-D), IBS with constipation (IBS-C), IBS with mixed bowel habits (IBS-M), and unclassified IBS (IBS-U) (12,13). A large subgroup of IBS patients experiences extra-intestinal symptoms, including psychiatric and mood disorders (12,14).

Early life adverse events, comprising psychological and physical stress as well as traumatic experiences during childhood have been identified as a predisposing factor for IBS development (14,15). Several factors are involved in the pathophysiology of IBS including unbalanced gut microbiota, low-grade immune activation, overactive serotonergic system, and intestinal barrier dysfunction (14,16).

### DISCUSSION

A patient's perception of disease and medical treatment is at the core of medical practice (2,17). Patients' emotions and life challenges are often more important than the physical discomfort caused by the IBS (17). There has been increased scientific attention to understand the nature of medical disorders from the patient's perspectives (2,17). Patients with IBS often experience symptoms for many years, with an average duration of 10 years or more. There has been an underestimation of the impact of IBS on an individual's functioning and quality of life (17).

### CONCLUSIONS

Overlapping conditions can co-exist with IBD and explain IBS-like symptoms (Irritable Bowel Syndrome-Like Symptoms in Quiescent Inflammatory Bowel Disease). The diagnostic work-up in this population should be individualized and tailored to the predominant symptom pattern, associated clinical signs and symptoms and predisposing conditions that can be obtained from a detailed history and physical examination (18).

### TREATMENT/ GENERAL ADVICE

Cognitive behavioral therapy for IBS (19), (efficacy defined as 50% reduction of symptoms) showed significant benefit with a mean number need to treat (NTT) versus controls of

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approximately two (2 patients NTT for 1 to benefit) / Psychological treatments for irritable bowel syndrome (18,19).

- a) Gut directed hypnotherapy can have long lasting effects, of 204 patients with resistant IBS symptoms, 81% of initial responders had benefit 5 years after completion treatment (20).
- b) Fiber bulking can help treat constipation predominant IBS (21).
- c) Enteric coated peppermint oil (0,2 a 0,4 ml “200 - 400 mg”) three times daily in adults. Reduced pain and spasm of IBS (22).
- d) Tricyclic antidepressants should be considered in the treatment of pain predominant IBS (23).
- e) Tegaserod is more effective than placebo at relieving global IBS symptoms in female patients who have constipation predominant IBS (24).
- f) Alosetron is more effective than placebo at relieving global IBS symptoms in female patients who have diarrhea predominant IBS (25).

**Ethical Statements:** According to Colombian law, case reports do not need to be approved by the Ethics Committee; however, the work complies with the ethical guidelines of the Helsinki declaration and the Oviedo convention, as well as the ethical standards of the University (Pontificia Universidad Javeriana de Cali- Colombia).

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