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PREVALENCE, SYMPTOMS, DIAGNOSIS, AND ATTITUDE OF IRRITABLE BOWEL SYNDROME OVERVIEW

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Abstract:
Irritable bowel syndrome (IBS) is a chronic functional gastrointestinal (GI) disorder characterized by abdominal pain and altered bowel habits. Symptom-based criteria are typically used to diagnose IBS. An estimated 10% of the general population has IBS. Little is known about the prevalence, symptoms, diagnosis, attitude, and referral to specialists of patients with irritable bowel syndrome (IBS) in general practice. This study aimed to determine these characteristics.

Keywords: *IBS (irritable bowel syndrome), LMA (lactose malabsorption), MMPI (Minnesota Multiphasic Personality Inventory)*

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INTRODUCTION:

Irritable bowel syndrome (IBS) is a common disorder that affects the large intestine. Signs and symptoms include cramping, abdominal pain, bloating, gas, and diarrhea or constipation, or both. IBS is a chronic condition that patients will need to manage long term. Only a small number of people with IBS have severe signs and symptoms [1]. Some people can control their symptoms by managing diet, lifestyle and stress. More-severe symptoms can be treated with medication and counseling. IBS doesn't cause changes in bowel tissue or increase your risk of colorectal cancer. IBS affects between 25 and 45 million Americans. Most of them are women. People are most likely to get the condition in their late teens to early 40s. IBS is a mix of belly discomfort or pain and trouble with bowel habits: either going more or less often than normal (diarrhea or constipation) or having a different kind of stool (thin, hard, or soft and liquid) [2]. It's not life-threatening, and it doesn't make you more likely to get other colon conditions, such as ulcerative colitis, Crohn's disease, or colon cancer. But IBS can be a long-lasting problem that changes how you live your life. People with IBS may miss work or school more often, and they may feel less able to take part in daily activities. Some people may need to change their work setting: shifting to working at home, changing hours, or even not working at all. Prevalence of IBS in the general population understanding of the etiology, pathogenesis and treatment is limited. Although many IBS sufferers do not seek medical care, IBS has been estimated to account for 20% - 50% referrals to gastroenterology clinics3 It varies in severity from trivial to incapacitating. The more severe cases are associated with poor quality of life, absenteeism from work, frequent consultation with medical professionals, and psychosocial distress [3]. The cost associated with the diagnosis and treatment is largely sustained by the patient themselves or their employers. The indirect costs are related to the production losses due to morbidity, associated with the pain, suffering and alteration in the patient's quality of life. Hence, it is a major burden on health care resources. Absence of physical findings and diagnostic tests for clinical use has led to the diagnosis of IBS being based on symptom-based criteria for IBS such as Manning, Rome I and 115 when used in combination with a detailed history, physical examination, and limited diagnostic testing, these criteria are a valid method of diagnosing IBS. Irritable bowel syndrome is a stable diagnosis. Once initial investigations are negative, fewer than 5% are diagnosed with an alternative organic gastrointestinal disorder. Repeated diagnostic evaluations of patients with recurrent or persistent symptoms similar to their baseline symptoms are not warranted6. Anxiety disorders, depressive disorders, and somatoform disorders are the more frequently occurring comorbid conditions. Psychosocial stressors and history of trauma and abuse, play a significant role in the onset and perpetuation of IBS symptoms [4].

There has been an extensive research on the disease and no proven single etiology or effective treatment has emerged. Possible abnormalities in the processing of sensory stimuli in the "brain-gut" axis lead to the visceral hypersensitivity and secondary motility change. In some patients, a multi-factorial mechanism including stressful life events or other psychological factors contribute considerably [5]. Once a confident diagnosis of IBS has been made, treatment should be based on the predominant symptom while taking into account the severity of symptoms and the degree of functional impairment both physically and psychologically. Most patients with IBS have m1la symptoms and education. reassurance, dietary and lifestyle changes, and a therapeutic physician-patient relationship form the backbone of treatment. A smaller number of patients have moderate symptoms, which are typically intermittent, but may at times interrupt their normal activities. There is a predominance of women as compared to men who seek health care services for IBS in the United States and other industrialized societies. However, in our previous studies IBS like symptoms were more frequently experienced by males who out-numbered females [6-8]. This may be attributed to natural reluctance of females to volunteer information regarding their bodily function. Menstrual cycle-linked differences are observed in IBS symptom reports. Women with IBS tend to report greater problems with constipation and non-gastrointestinal complaints associated with IBS. Serotonin (5-HT3) receptor antagonist and 5-HT 4 partial agonist drugs appear to more effectively diminish reports of bowel pattern disruption in women with IBS as compared to men [9-13].

The therapeutic management of the IBS is ineffective and not satisfying either patients or practitioners. Building a therapeutic relationship with the patient over time will likely enhance the effectiveness of the prescribed therapy [14].

Both high-fibre dietary advice and the prescription of fibre as a bulking agent are very common in primary and secondary care management of IBS. Irritable bowel syndrome patients with constipation may have delayed intestinal transit. Therefore. fibers that accelerate intestinal transit may be beneficial in these patients. The uncertain benefits reported in several

clinical studies, however, have led us to reappraise the value of fibre in irritable bowel syndrome management [15].

The irritable bowel syndrome remains a therapeutic challenge in part because of the limited understanding of the pathcphysiology. The placebo response rate varies in randomized controlled trials from 20% to 70%, and can persist for up to at least one year. It is contentious whether dietary fiber and bulking agents relieve the symptoms of IBS but constipation probably improves. Anticholinergic and antispasmodic agents ·are of questionable benefit in IBS. Laxatives are used for constipation but probably poorly control the IBS symptoms complex [16]. Loperamide is superior to placebo in improvement of diarrhoea but not abdominal pain in IBS. A meta-analysis concluded that the tricyclic antidepressants were superior to placebo in IBS, although the individual trial results were variable. Selective serotonin reuptake inhibitors are of uncertain benefit. Tegaserod is a well- tolerated aminoguanidine indole derivative of serotonin that is a partial 5HT 4-receptor agonist with prokinetic properties. A therapeutic gain over placebo of 5% to 15% has been observed in constipation-predominant IBS in females. Alosetron is a 5HT3-receptor antagonist that is efficacious in females with diarrhoea-predominant IBS, with a 12% to 17% therapeutic gain. Meanwhile risk of ischaemic colitis is 1 in 350, with very severe constipation occurring in about 1 in 1000 cases [17-20].

Research in functions of the enteric nervous system and its interaction with the central nervous system is the basis for the development of emerging pharmaceuticals in therapy of the IBS. These pharmaceuticals include agents such as opioid agonists, psychotropic agents and particularly serotonin receptor modulators. 5-HT (3)-receptor antagonists are highly selective competitive inhibitors of the 5-HT (3)-receptor with negligible affinity for other receptors. They are potent, rapidly absorbed and easily penetrate the blood-brain barrier. They are metabolized by the cytochrome P450-system with half-life varying from 3-10 hours. The 5-HT (3) receptor antagonists, via a central and / or peripheral action, have been shown to reduce secretion and motility in the gut and possess clinical utility in irritable bowel syndrome, and possibly other visceral pain disorders. Tegaserod is a new partial agonist of serotonin 5-HT 4 receptors specifically developed for the treatment of nondiarrhoeal forms of IBS. Among its various effects, is the stimulation of the peristaltic reflex with its promotility action appearing to affect the whole length of the gastrointestinal tract. It also appears to improve bloating, a benefit that has not been previously reported for a medication used in IBS. The optimal dose is 6 mg twice daily and the advantage of tegaserod over placebo in different trials varies from 5%-20% with the number needed to treat ranging from 5%-15% depending on the time at which this effect is calculated during the course of a trial [21].

DISCUSSION:

It is important to provide the patient with a comprehensible pathophysiological model of the disease and the management plan. Ruling out possible more threatening differential diagnoses and establishing a relationship of trust between physician and patient will both promote treatment success [22]. Individual triggering factors should be identified and taken into account (evidence level D, recommendation strength ↑↑, strong consensus). The measure of any treatment plan is how far symptoms improve and how well the patient tolerates it, and all treatments are trial treatments at first because it is impossible to predict the response to treatment in any particular case [23]. This should be discussed with the p atient beforehand. Any treatment regime that is s uccessful can be continued, changed to a long-term or as-needed regimen, or interrupted for a trial with drawal. If treatment success is inadequate, various drugs (and non-drug treatments) may be used in succession or in combination. Ineffective drugs should be terminated after 3 months at the latest (evidence level D, recommendation strength ↑, strong consensus). After careful individualized weighing up of the risks and benefits, in some cases, especially in patients with severe symptoms that are refractory to treatment, off label therapies may be worthwhile, if current scientific knowledge suggests there is reason to expect relevant therapeutic utility. The same applies to active substances that to date are only licensed abroad, although in this case consultation with a specialized center is advisable (evidence level D, recommendation strength , consensus). As to nutrition and lifestyle there are no general prescriptions. However, nutritional and behavioral advice should be given to eliminate individual symptom triggers (e.g., stressors, defined foods, lack of exercise or sleep, and so on). Likewise, psychological influential factors and co-morbidities (e.g., depressive d isorders) and extraintestinal symptoms (tendency to somatization!) should be ascertained[24-27].

Alternative therapies cannot be recommended at present because of a lack of data; complementary therapies may be considered in individual cases (evidence level A* for acupuncture, otherwise C/D; recommendation strength ↓; strong consensus). *A

meta-analysis of several acupuncture studies found no acupuncturespecific effect on irritable bowel syndrome [28]. Nutritional recommendations Although no general dietetic measures are recommended, individualized advice orientated to the existing symptoms and individual intolerances should be given [29].

Psychological co-morbidities to register the psychological co-morbidities that are often present in patients with IBS, it is often enough simply to ask about anxiety disorders and depressive symptoms, and (careful!) exploration of trauma and abuse. If appropriate, the patient should be referred for professional psychiatric/psychological/psychosomatic examination and/or care (evidence level D, recommendation strength, strong consensus). Any signs of r elevant psychosocial stress also indicate psychological diagnostic steps and possibly psychotherapy. At the same time, general medical care should be continued (evidence level A, recommendation strength, consensus). At the general and specialist medical level, basic psychotherapeutic intervention can often be carried out to favorable effect, e.g., using self-help strategies (evidence level A, recommendation strength, strong consensus). Pure relaxation therapies (autogenic training, etc.) should not be carried out as monotherapy, but should be combined with other measures (evidence level B, recommendation strength, consensus). More costly and time-consuming psychological techniques (gut-directed hypnosis, cognitive behavioral therapy, psychodynamic therapy) are effective and should be integrated in an interdisciplinary therapy plan (evidence level A, recommendation strength ↑, strong consensus) [30-34]. Antidepressants may be indicated in the presence of psychological co-morbidities (anxiety disorder, depression) (evidence level A, recommendation strength ↑, strong consensus). Tricyclic antidepressants to treat the irritable bowel symptoms (diarrhea, pain; beware of constipation) should be given at doses lower than the usual (evidence level A, recommendation strength ↑, strong consensus); selective serotonin reuptake inhibitors (SSRIs) in particular can also be given in c onstipation-dominant IBS (evidence level B, recommendation strength, consensus). However, irritable bowel symptoms seem not to respond to antidepressants in the absence of psychological co-morbidities [35,36].

CONCLUSION:

IBS is a common disorder characterized by abdominal pain and altered bowel habit for at least 3 mo. A 2009 position statement issued by the ACG states that no symptom-based criteria have ideal accuracy for diagnosing IBS. Therefore, the ACG Task Force defines IBS as abdominal pain or discomfort that occurs in association with altered bowel habits over a period of at least 3 mo. The Task Force recommends that further investigations are unnecessary in young patients without alarming features with the exception of celiac sprue serology, which may be of benefit in some patients. Further investigation such as colonoscopy is recommended in those over 50 years of age and in patients with alarming features. Trials suggest psyllium fiber, certain antispasmodics, and peppermint oil are effective in IBS patients although the quality of the evidence is poor. Evidence suggests that some probiotics may be effective in reducing overall IBS symptoms but more data are needed. Anti diarrheals reduce the frequency of stools but do not affect the overall symptoms of IBS.

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