Therapeutic management of gastrointestinal disorders

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ABSTRACT

Chronic gastrointestinal disorders are becoming more widespread among the population, thereforephysicians and pharmacists are meant to use their knowledge and deliver appropriate treatments according to the needs of each patient, relying onnew research results and medical practice acquisitions. Common chronic gastrointestinal disorders are: gastroesophageal reflux disease, dyspepsia, irritable bowel syndrome, coeliac disease, inflammatory bowel disease, with a growing global incidence and prevalence, especially in Western countries, being closely linked to socio-economic progress.The effect of patient counseling is seen inimproving the patient`s quality of life. As part of medication therapy management, patient counseling focusing on compliance, diet and medications is an effective toolto improve health-related. Such services improve outcomes in chronic gastrointestinal disorders.

Keywords: gastrointestinal diseases, primary healthcare, pharmaceutical care, therapeutic management

INTRODUCTION

Chronic gastrointestinal disorders are very common among the population about 60% of adult population had gastrointestinal symptoms. In other words, about 10% of all clinical work in primary care target gastrointestinal disorders [1]. Moreover the costs in primary care are substantial. These figures state that gastrointestinal disorders are not well managed in general practice and consequently ambulatory visits and professional pharmacy services are constantly increasing. Due to poor management of gastrointestinal disorders they impair the patient quality of life with a negative impact on health care services.

Common chronic gastrointestinal disorders are: gastroesophageal reflux disease, dyspepsia, irritable bowel syndrome, celiac disease, inflammatory bowel disease. They can occur during the life, although there are studies showing that over 80% of cases are currently diagnosed in the second or third decade of life [2]. Gastrointestinal disorders have a growing global incidence and prevalence, especially in Western countries being closely linked to socio-economic progress. Geographical variations are noted, being a north-south and west-east gradient of the incidence and prevalence of these diseases worldwide [3]. Very important in critical care system is the efficient management of acute gastrointestinal disorders such as acute gastrointestinal hemorrhage,

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which is a potentially life-threatening emergency with a 10% mortality rate [4].

In actual national health care system family physicians and also pharmacists are the first contact health care professionals seen by the patients. Knowledge of therapeutic guidelines by the family physicians and correct application of the pharmaceutical services offered by the pharmacists are efficient strategies for a good management of chronic gastrointestinal disorders. The management of gastrointestinal disorders imply many differences between family physicians from world countries, but studies revealed that all over the world there are high levels of awareness of guidelines for management of gastrointestinal disorders among family physicians [5].

INFLAMMATORY BOWEL DISEASE

In the last two decades, the inflammatory bowel disease incidence and prevalence are increasing. This increasing of the global incidence of inflammatory bowel disease must be analyzed in the context of an aging population. The elderly population diagnosed with this type of disease represented 3-17.8% of the general population [6]. The challenges in the management of inflammatory bowel disease in geriatric patients occur as a result of associated comorbidities and polymedication, currently not being a general consensus on management in geriatric patients with inflammatory bowel disease. The maximum incidence of inflammatory bowel disease is between 20 and 39 years, but a second peak is between 50 and 70 years. In the case of the elderly population segment, the incidence decreases with age, 65% of patients are aged between 60 and 70 years, 25% are aged between 70 and 80 years and only 10% over 80 years [7,8]. Regarding the data for our country, these revealed that there is a low incidence of inflammatory bowel disease. Crohn's disease began at a younger age, with a slight predominance of females while ulcerative colitis had an age of onset similar to that of the western population, with aequal distribution by sex [9,10,11].

The treatment of inflammatory bowel diseases consists in inducing disease remission, in preventing complications related to treatment and in improving the patient quality of life. In choosing a therapeutic agent will be taken into account pharmacodynamic properties of each drug, drugs interactions, evolution of the disease, adherence to treatment and patient

comorbidities. It will be taken into account that treatment of patients with immunosuppressive drugs will increase the risk of opportunistic infections (bacterial, viral, fungal and protozoan). Particular attention should be paid to conditions related to age, functional status, cognitive status.

GASTROESOPHAGEAL REFLUX DISEASE

Gastroesophageal reflux disease (GORD) is a common gastrointestinal conditions estimated to occur in 10–15% of the population, with a rising prevalence [12,13]. The risk factors include obesity, advanced age, male gender, smoking, diets high in fats, sugars and salt. The GORD treatment has multiple approaches, one of them being the non-pharmacological one. Weight loss is associated with a reduction of symptoms (a 40% reduction when there is aweight loss in the body mass index of 3.5 kg/m2) [12]. Also, avoidance of meals 2–3 hours before bedtime, cessation of tobacco and alcohol, avoidance foods that specifically trigger the symptoms, avoidance drugs that exacerbate reflux symptoms are recommended. Classic treatments for patients with typical symptoms include proton pump inhibitor therapy. Taking into account that approximately 20–30% of patients do not respond to proton pump inhibitor therapy, increasing to twice-daily doses or trying a different proton pump inhibitor is a good strategy. Also, the use of night-time H2-receptor antagonist or a mucosal protectant is indicated when an intense effect is required [14,15,16]. For patients with suboptimal response or medically refractory, baclofen can be used in order to reduce the number of reflux events [17].

DYSPEPSIA

Dyspepsia is a common gastrointestinal disorder whose symptoms have a negative impact on the patient`s quality of life, and also a negative economic impact on health services. The prevalence of functional dyspepsia is increasing, 20% of the population has symptoms of dyspepsia globally. This gastrointestinal disorder costs world health systems with billions of dollars per year, thereby cost-effective management of dyspepsia can reduce the economic burdens [18]. Functional dyspepsia is treated by two major categories of drugs: acid inhibitors (H2-receptor antagonists, proton pump inhibitors) and prokinetic drugs [19]. Dietary and lifestyle modification are also recommended, including eating smaller meals, avoiding intake of dietary fat (which aggravate clinical symptoms),

avoiding coffee, alcohol, smoking and also NSAIDs use [20]. Standard drug treatments include H2-receptor antagonists which are used as first line therapy, proton pump inhibitors for which the efficacy is limited and prokinetic drugs which are more effective in improving postprandial fullness and early satiety [21]. Antidepressants are prescribed also as second line therapy, taking into account that dyspepsia is associated with depression and anxiety.

IRRITABLE BOWEL SYNDROME

It is the most common functional disorder of the gastrointestinal tract. The prevalence in the population ranges between 10-20% from which 10-30% seekmedical care [22]. The irritable bowel syndrome affects especially women, it is correlated with anxiety and depression and symptoms appears in juvenility for 50% of patients. The symptoms are from abdominal pain to diarrhea, constipation, dyspepsia, bloating and gas, all of which are more severe in increased stress and in some cases can prevent people from carrying out daily activities [23].

A strong pharmacist-family physician-patient relationship is effective in management strategy for irritable bowel syndrome. Promoting physical activities and dietary recommendations such as avoiding or limiting coffee, alcohol, sorbitol and fat are useful. Fiber supplementation is indicated for the constipation and it may also reduce pain in irritable bowel syndrome. Fiber (water-soluble fibre) should be started gradually in low doses to avoid bloating. Osmotic laxatives improve stool frequency and consistency. Pain, diarrhea and constipation management is important, psychotropic agents, 5-HT4 agonists and loperamide may be effective. Also, agents that target multiple

symptoms in patients with irritable bowel syndrome include linaclotide and lubiprostone are used [23].

CELIAC DISEASE

Coeliac disease is an immune-mediated intestinal disease which appear due to exposure to dietary gluten in genetically predisposed people. Previously it was considered a rare disease affecting mainly children. Its prevalence in the population is around 1%, being more frequently diagnosed in women than in men. Patients with celiac disease present malabsorption with diarrhea, steatorrhea, weight loss. Today many other symptoms are related to celiac disease including anaemia, neuropathy, ataxia, depression, osteoporosis and liver disease [24]. The only available therapy for celiac disease is gluten-free diet which reduces clinical symptoms and increases nutritional parameters including body weight and bone density. This treatment is a challenge and implies a close pharmacist-physician-nutritionist-patient relationship in order to increase patient quality of life [25].

CONCLUSIONS

By providing adequate medical and pharmaceutical care, the therapeutic compliance, reducing complications and quality of life will be improved for patients with gastrointestinal disorders. Pharmaceutical and medical care are important tools for the clinical management of these patients in order to minimize their symptoms, to improve their life and to decrease the number of hospital admissions. Also, there will be a reducing of morbidity and mortality and a positive impact on health system costs.

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