TREATMENT RESULTS OF CHILHOOD CONSTIPATION IN TWO DIFFERENT DEPARTMENTS

Original Article

ÇOCUKLUK ÇAĞI KONSTİPASYONU TEDAVİSİNDE İKİ AYRI BİLİM DALININ SONUÇLARI

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ABSTRACT:

Objectives: Purpose of our study is to compare the effects of lactulose and magnesium hydroxide on prospectively in patients complaining of constipation in two different departments.

Method: A questionnaire was prepared. The questions were asked to the patients and a trourough physical examination was performed in both outpatient clinics. The preferred drug was magnesium hydroxide in pediatric surgery clinic, and lactulose in gastroenterology clinic. Behaviorial information was given to all patients. Patients were called for control on 2 and 10 th weeks after the initiation of the treatment.

Results: A total of 43 patients were included in the study. Of these 27 patients referred to pediatric surgery, and 16 patients gastroenterology outpatient clinics. Ten (%39) patients who were treated by pediatric surgery outpatient clinic and 9 (%53) patients who were treated by gastroenterology outpatient clinic had responded to treatment at the second week controls. All the patients who had treatment in the both outpatient clinics had improvement in their symptoms at the tenth week controls.

Conclusions: In our study, no significant difference was observed in the treatment of patients with both drugs. However, treatment of constipation be treated with medication alone is probably not enough, we should be in good communication with patients and their families, such as behavior and diet therapy are as important as medication for obtaining good results.

Key words: *constipation; lactulose; magnesium hydroxide.*

ÖZET

Amaç: Çalışmamızdaki amaç iki farklı polikliniğe kabızlık şikayetiyle başvuran hastalarda laktüloz ve magnezyum hidroksitin prospektif olarak etkilerini karşılaştırmak ve belli parametreler üzerinden hastalar üzerindeki etkinliklerini araştırmaktır.

Metod: Belli parametreler üzerinden kabızlık formları oluşturularak polikliniğe başvuran hastalara bu sorular yöneltildi ve 2. , 10. hafta kontrollerine çağrıldı. Çocuk cerrahisi polikliniğine başvuran hastalara magnezyum hidroksit, gastroenteroloji polikliniğine başvuran hastalara ise laktüloz başlandı.

Sonuç: Çalışmamıza toplam 43 hasta dahil edildi. Bunlardan 27 hasta çocuk cerrahisi polikliniğine, 16 sı ise gastroenteroloji polikliniğine başvuran hastalardır. Tedavi başlanan hastaların 2. hafta kontrollerinde çocuk cerrahisinden 10 (%39), gastroenterolojiden ise 9 (%53) hasta tedaviye cevap almıştı. 10. Hafta kontrollerinde ise her iki polikliniğe başvuran tüm hastaların semptomlarında düzelme sağlanmıştır.

Tartışma: Çalışmamızda her iki ilacın hasta tedavisi açısından anlamlı bir fark görülmemiştir. Ancak kabızlık tedavisinin sadece ilaç verilerek tedavi edilmeye çalışmasından öte hasta veya hasta yakınıyla iyi bir iletişim içinde olup davranış ve diyet tedavisi gibi ek önerilerin yapılması tedavi sonucunu daha olumlu kılacağını düşünüyoruz.

Anahtar kelimeler: *Kabızlık; Laktüloz;Magnezyum hidroksit.*

INTRODUCTION

Constipation, defined as a delay or difficulty in defecation, present for 2 or more weeks according to the Constipation Guideline Committee of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (1). Constipation is one of the frequent complaints in childhood that brings the families to outpatient clinics. Although there are many reasons, the most common cause of constipation in children is functional constipation with a rate of %90-95. In these patients, in the light of the current-to-date information, no anatomical, neurogenic, or another reason could be found to explain the cause of constipation._A detailed history should be taken to be able to treat constipation._In some children, cause of constipation may be the result of a congenital disease or a previous trauma. However, surely we must question nutritional content and medications taken (2)._In patients with severe constipation accompanied by incontinence and spina bifida as well as in patients with anorectal malformations, which do not respond to medical treatment, Malone procedure is an option (3). Some patients can apply for emergency services due to severe constipation with complaints of abdominal pain and distension. Abdominal mass should be ruled out in such patients with the use of abdominal ultrasound (4). Sometimes patients with severe abdominal distension may refer with scrotal pain due to nerve compression to the emergency services (5). Also, while taking the history of constipation, outpatients or patients must be questioned for complaints of urinary incontinence and voiding difficulties (6). Patients, other causes of outpatient visits may also encopresis._In such cases the treatment with diet and enemas have been shown to provide effective treatment of the laxative (7). Treatment of constipation requires the patience of both the physician and the family. Treatment of childhood constipation consists of four steps: education, disimpaction, prevention of re-accumulation of faeces and follow-up and these should be explained to the family in detail (8). In our study, a prospective comparison of treatment using

the same approach protocol and two different drugs for constipation in 2 different outpatient clinics, pediatric surgery and pediatric gastroenterology, were made.

METHOD

A constipation questionnaire was created and the same form was used in both departments. Age, gender, beginning of constipation, stool frequency, staining of the underwear, diet, comorbid disease, previous medical treatments, and Bristol stool scale were documented. As a treatment for constipation, magnesium hydroxide was given to pediatric surgery patients and lactulose was given to gastroenterology patients. Besides medical treatment, families received training in diet and behaviour. Local anesthetic ointment and hot sitz baths were proposed to patients with anal fissure. Patients were examined at second and tenth weeks after the first examination.

RESULTS

Of the 43 patients that were enrolled, 26 patients were treated by pediatric surgery, 17 by gastroenterology units. Patients' age range was 8 months-15 years in pediatric surgery group, and 2-15 years in paediatric gastroenterology group. According to the Bristol stool scale, 60% of patients had type-2-3 stools (**figure-1**).

Figure-1. *Bristol Stool Scale*

Fourteen patients that were admitted to surgical and 2 patients that were admitted to gastroenterology outpatient clinics had anal fissure. Two patients, one was operated for anorectal malformation, and another with anal stenosis, underwent bougie dilation. Ten patients (39%) that were referred to surgery, and 9 patients (53%) that were referred to the pediatric gastroenterology unit have responded to treatment at the end of second week of follow-up. Drug dose adjustment was applied and the importance of diet therapy was emphasized in 9 patients during controls. All patients in both groups have responded to treatment regardless of medication at the end of 10 weeks.

DISCUSSION

Constipation treatment should be planned after a thorough physical examination and listen children's story with disease . Ease of use and long-term side effects of treatment should be considered. Many of the drugs available in the market for constipation have similar mechanisms.Several studies compared these drugs to each other and compared the long-term usage.Factors affecting the success in these studies are drug treatment effectiveness as well as the education of the family effecting the compliance and behavior of the child (9,10). Additional pathologies such as anal

fissure, anal stenosis and anorectal malformation were more frequent in pediatric surgery patients (61%) compared to gastroenterology patients (12%) in our series. This finding may explain the slightly lower response to treatment in the end of second week in surgical patients compared to gastroenterology patients. There were no differences in lactulose and magnesium hydroxide groups at the end of 10th week. Overall 73% of patients previously had received medical treatment at another centre without any result. We think that, in addition to two different laxatives, behavioural treatment, diet adjustments and approach to additional pathologies helped us to get positive results in these patients.

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