ERİŞKİNLERDE İNVAJİNASYON

INTUSSUSCEPTION IN ADULTS

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Özet

Kliniğimizde invajinasyon teşhis edilen sekiz hastayı yaş, cins, klinik, radyolojik ve histopatolojik yönünden literatür ışığında tartıştık. Hastalarda abdominal ağrı, bulantı, kusma, kabızlık ve hematoçezya gibi semptomlar mevcuttu. Beş hastaya ultrasonografi, bir hastaya tomografi tetkiki yapıldı ve tümünde target görünümü tespit edildi. Hastaların hepsi opere edildi. Hastaların %50 sinde etyoljik sebeb bulundu, %50 sinde bulunamadı. İki hastada malign lenfoma, birinde polip ve birinde de neden post operatifdi. İnvajinasyon erişkinlerde nadir ve teşhisi zor olan bir hastalıktır. Sonuç olarak, invajinasyon polip veya malignensi gibi predispozan sebeblere bağlı olarak gelişir. Postoperatif inkomplet intestinal obstrüksüyonlarda invajinasyon da düşünülmelidir. Sonografi ve tomografi invajinasyon teşhisinde yardımcıdır.

Anahtar kelimeler: *İnvajinasyon, Erişkin*

Summary

Eight patients were treated because of invagination in our clinics. Patients were discussed according to their age, sex, and clinical, radiologic and histopatologic findings under the light of literature. The symptoms included abdominal pain, nausea, vomiting, constipation and hematochezia. Sonographic examination was performed in 5 patients and target appearence was demonstrated. Tomography was performed in 1 patient and target-like appearance was seen. All of the patients were subjected to operation. The etiologic cause was found in 50% of the patients, and we could not identify any cause in 50%. The etiologic causes were malignant lymphoma in 25%, postoperative occurence in 12.5%,and polip in 12.5%. Intussusception is rare condition in adult and the diagnosis is diffucult.

As a conclusion, adult patients with must be evaluated because of predisposing factors such as polyp or malignancy. In patients with postoperative incomplete intestinal obstruction, intussusception must be kept in mind. Sonography and tomography are helpful in diagnosis of intussusception.

Key words: *Intussusception, Adult.*

AÜTD 1997, 29:379-381 **MJAU 1997, 29:379-381**

Introduction

Invagination is defined as telescoping a segment of gastrointestinal tract into an adjacent one (1-3,4). Invagination which ranks second only to appendicitis as the most common cause of acut abdominal urgency in children, is one of the leading causes of intestinal obstruction. One of the complications of childhood intussusception is strangulation of the intussuscepted bowel(1-3). However, in aduls it is a rare condition(1-3,5). It accounts for 0.1% of all adult hospital admissions and 5%-16% of all invaginations (1,2,4). About 90% of invaginations in adults occur in small or large bowel, the other 10% involve the surgically created stomas (1-3). In children it is idiopathic in 90% of cases (1,3,5-7), but in contrast adult invagination has a demonstrable cause such as Meckel's diverticulus, tumor, dublication, or intestinal hematoma in 90% of cases (1-3, 6-8). This report summarizes a rewiev of intussusception in 8 adult patients at one instituon during the last 5 years. In 4 (50 %) of these, causative factor or factors were identified, and four were considered idiopathic.

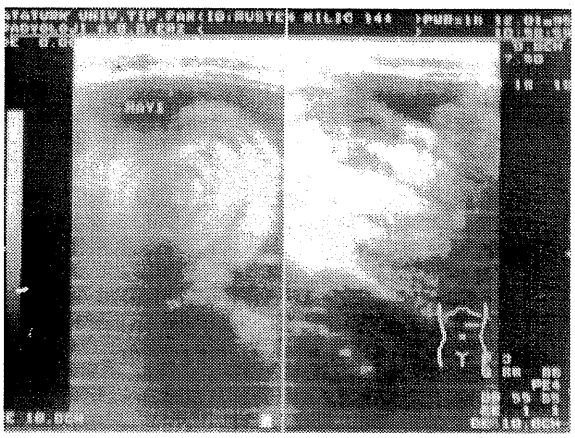
Materials and Methods

Eight patients were treated because of invagination in our clinics. Patients were discussed according to their age, sex, and clinical, radiologic and histopatologic findings under the light of literature.

Results

Of the patients, 5(62.5%) were male and 3(37.5%) female. The mean age was 28.7(range17-50) years. The symptoms were abdominal pain, nausea, vomiting, constipation and hemathochesia.There was abdominal tenderness in all patients. In one patient there was a 6x8 cm mass in left lower quadrant. Plain abdominal radiograms showed gas-fluid levels. Ultrasonography was performed in five patients, and target-like

Fig. 1. *Transverse (A) and Longitudinal (B) Sonograms. Targetlike Appearence.*



appearance was seen (Fig. 1). Tomography wasperformed in 1 patient, and target-like appearence was also detected in that patient (Fig. 2). Colonoscopy was performed in one patient and an intraluminal mass, which did not allow to examine proximal part of the right colon was determined . All of the patients underwent resection and end - to - end anastomosis. The patient did not have any problem in the postoperative period. There were ileocolic intussusception in 3(37.5%), ileoileal intussusception in 4(50%), and jejenoileal intususception in 1(12.5%) patients . Etiologic causes were malignant lymphoma in 2(25%), postoperative occurence in 1 (12.5%), and polyp in 1 (12.5%). In 4(50%) patient we could not were determine any cause. determine any cause. The patient who had postoperative intussusception, had been operated because of penetrating abdominal trauma 15 days earlier. Histopathologic examination showed chronic ileitis in that patient.

Discussion

Intussusception is primary disease of childhood (1,2). However, it is rare in adults (9. Five percent of the intussusceptions, occurs in adults (1,2). Althougt 90% of intussusceptions are idhiopathic in children, a leading cause could be demonstrated in 90% of adults (1,2,6). Eighty six percent of 144 adult patients, who treated because of intussusception in Mayo Clinic, had a demonstrable cause (7). Bening or malign tumors, postoperative intussusceptions, meckel diverticulum could cause intussusception (1,2,6-8). In small series idhiopathic intussusceptions as high as 47%, whereas in large series it is lower (7).

We could not identify any cause in 4 patients (50%). Postoperative intussusceptions differ from the others. Incomplet intestinal obstruction devolops at 5-7 th postoperative days (10). Intestinal anastomosis, adhesions, electrolit imbalance, long intestinal tubes may be a predisposing factor for postoperative intussusception(1). In our series the patient who developed postoperative intussusception had mesenteric lymphadenitis, and chronic ileitis in histopatologic examination. The tumors which cause small bowel intussusception are thought to be benign, whereas those which cause large bowel intussusception are thought to be malign. Submucous lipomas which located at ceacum or ascending colon also could cause intussusception (6,9). Zielke et all (11) reported a submucous lipoma at terminal ileum which caused intussusception in a 86-year -old male. We demonstrated polypoid tissues which had hemorhagic infarction in 1(12.5%) patient and malign lymphoma in 2(25%). The intestines were normal in all of the patients. The diagnosis is difficult in adults compared to infants. Sonography and tomography could be used for diagnosis in addition to physical examination and barium enemas. Sonography could demonstrate a target-like image with an anecoic mantle and an echogenic core. This appearance is similar to kidneys' sonographic appearence(12,13). Zielke et al (11) reported triple ring phenomenon at sonography in patient with ileoceacal intussusception and the "duck-beak phenomenon" as signs of enterocolic intussusception. Parienty et al (9). reported that intestinal intussusception could be easily recognized by tomography because of stratified musculerlike layers. Gaa and Deininger(14) investigated sonographic and CT features of ileocolic intussusception in adults. In their report the CT pattern was interpreted as a mass consisting of several periferal striata of dense tissue incompletely and barely seperated by thin fatty stripes. We performed sonography in 5 patients and target-like image was demonstrated.

Tomography was performed in 1 patient and target like image was demonstrated. In conclusion, adult patients with intussusception must be evaluated because of predisposing factors such as polyp or malignancy. In patients with postoperative incomplete intestinal obstruction, intussusception must be kept in mind. Sonoggraphy and tomography are helpful in diagnosis of intussusception.

Fig. 2. *A targetlike Appearence in Sonography*

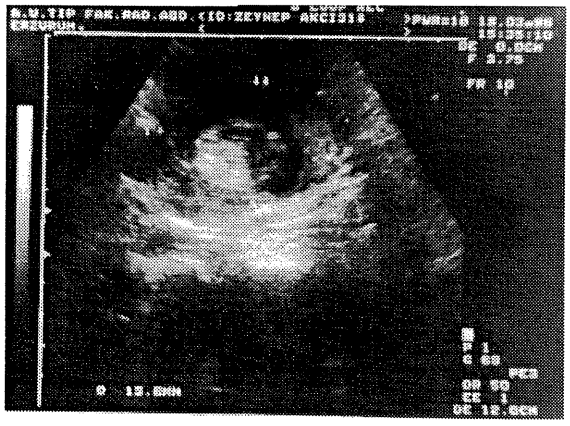
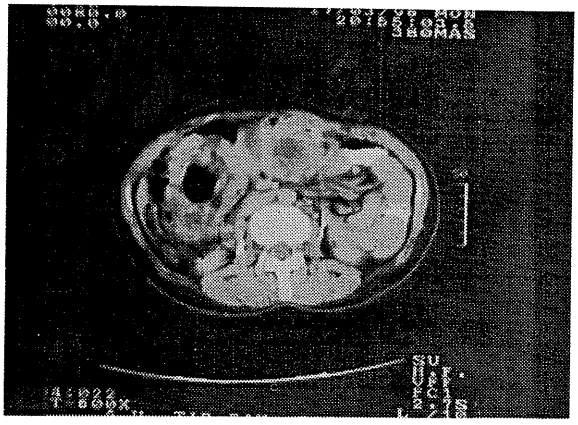


Fig. 2. *B Targetlike Appearence in Computed Tomogram of the Same Patient.*



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