

Karın Ağrısının Nadir Nedenlerinden Biri: Chilaiditi Sendromu

One of the Rare Causes of Abdominal Pain : Chilaiditi Syndrome

Emre Bülbül¹, Sıtkı Sarper Sağlam², Oğuzhan Bol¹, Mahmut Fırat Kaynak¹, Gökhan Yılmaz¹

¹Kayseri City Training and Research Hospital Emergency Medicine Clinic

²Kahramanmaraş City Hospital Emergency Medicine Clinic

ÖZ

Chilaiditi sendromu ilk olarak 1910 yılında tanımlanmıştır(1). Kısaca kalın veya ince bağırsakların hepatodiyafragmatik interpozisyonu olarak tanımlanabilir(1). Bu sendrom toplumda çok nadir olarak görülen bir durumdur(2). Bazı hastalarda hiç semptom görülmez iken bazı hastalarda şiddetli karın ağrısı,kabızlı,ileus gibi tablolarla karşımıza çıkabilir.Bu olgu sunumunda da daha önce tekrarlayan karın ağrısı atakları olan fakat tanı almayan bir hastayı anlatmak istedik.A cil servise karın ağrısı ile gelen hastalarda ayırıcı tanıda chilaiditi sendromunun da akılda tutulması gerektiğini hatırlatmak istedik.

Anahtar kelimeler: Chilaiditi sendromu, karın ağrısı, ileus

ABSTRACT

Chilaiditi syndrome was first described in 1910(1). In short , it can be defined as hepatodiaphragmatic interposition of the large or small intestines(1). This syndrome is a very rare condition in the society(2). While some patients have no symptoms, some patients may present with severe abdominal pain, constipation, and ileus . In this case report, we wanted to describe a patient who had recurrent episodes of abdominal pain but was not diagnosed . We wanted to remind that chilaiditi syndrome should be kept in mind in the differential diagnosis of patients who come to the emergency service with abdominal pain .

Keywords : Chilaiditi syndrome, Abdominal pain, Ileus,

INTRODUCTION

Chilaiditi sign-syndrom was first described as hepato-diaphragmatic interposition of the colon or small intestine in 1910 by Demetrius Chilaiditi, a Vienna radiologist(1). This appearance is referred to as Chilaiditi finding in asymptomatic cases and as Chilaiditi syndrome when accompanied by symptoms(2). Hepatodiaphragmatic interposition is a very rare condition and is generally seen in the general population with a frequency ranging from 0.025% to 0.28% (3). . While no symptoms are observed in the majority of cases, acute or chronic symptoms may be observed in some patients (4).

In this case , the patient was referred to our clinic from the district hospital with a pre-diagnosis of perforation ; We aimed to present the patient who was diagnosed with chilaiditi syndrome as a result of necessary examinations.

Case

A 48-year-old male patient was admitted to the emergency service of a district hospital with the complaints of nausea, vomiting and abdominal pain, a diagnosis of perforation was made in the clinical and radiological examination per-

Sorumlu Yazar/Corresponding Author: Emre Bülbül
Kayseri City Training and Research Hospital Emergency Medicine Clinic

e.mail: kkartal008@hotmail.com

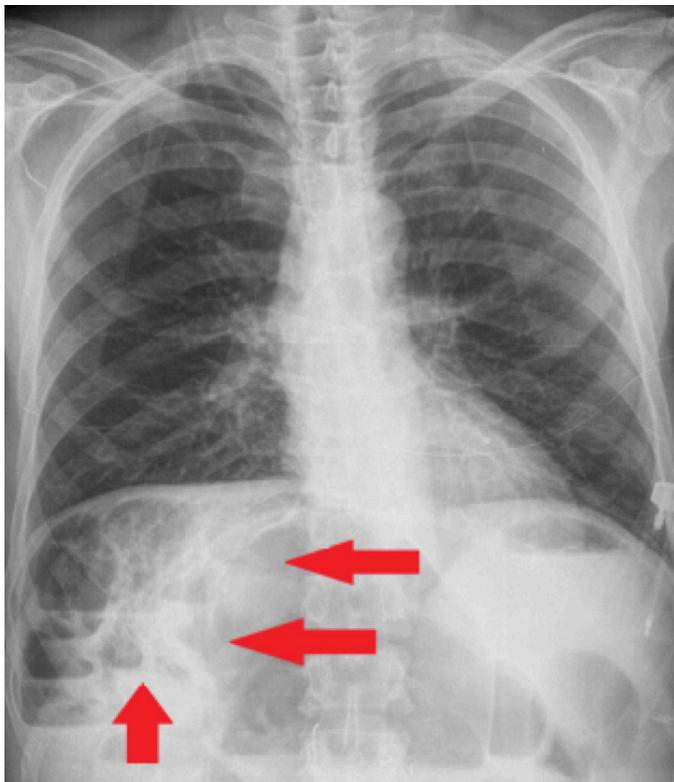
Tel: 05355475116

Geliş tarihi/Received: 12.02.2021

Kabul tarihi/Accepted: 22.03.2021

formed there, and free air under the diaphragm was written on the plain abdominal radiograph and was referred to the emergency service of our hospital via 112 ambulance. In the anamnesis of the patient, we learned that he had complaints of nausea, vomiting and abdominal pain for 2 days, these complaints were gradually increasing, and there was no gas and stool output since yesterday. In the physical examination, we found that bowel sounds increased, there was widespread tenderness in both lower quadrants in the abdomen, and there was no defense or rebound. We evaluated all other system examinations as normal. In the vitals of the patient, systolic blood pressure was 90 mmHg, diastolic blood pressure 60 mmHg (no difference in right-left arm blood pressure), heart peak beat 86 beats / min, respiratory rate 16 / min, body temperature was 36.7 C. In laboratory tests, white blood cell 11.63 mm³, In addition, no pathology was found in the blood gas and fully automatic urinalysis.

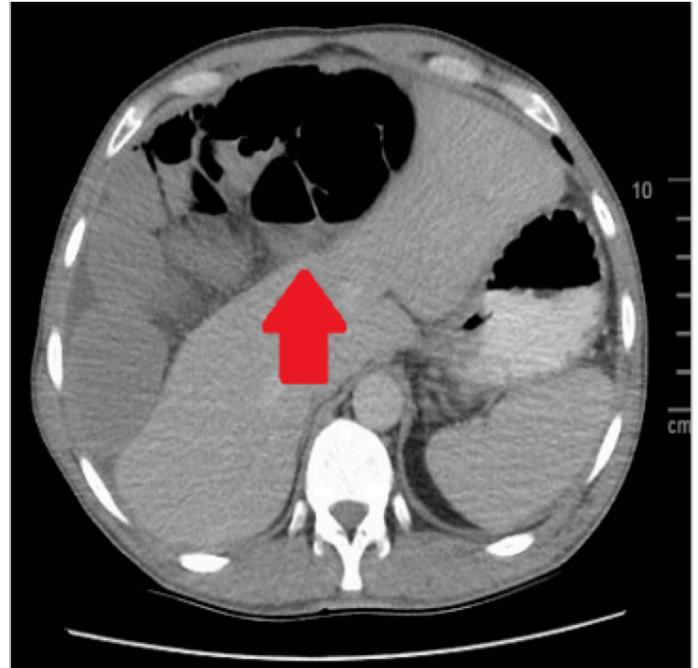
In the postero-anterior chest X-ray of the patient, more than normal elevation in the right diaphragm and an air image cut by colonic haustra between the liver and the right diaphragm were detected (Picture-1).



Picture 1.

His ultrasonography was requested for differential diagnosis and it was reported as ileus (?) by the radiology. Thereupon, computed tomography of the lower upper abdo-

men with intravenous contrast material was requested to explain the situation seen on direct radiography. Intestinal loops were seen anterior to the liver in the computed tomography of the patient (Picture-2).



Picture 2.

This image was evaluated in favor of chilaiditi syndrome. The patient was admitted to the general surgery service in consultation with general surgery. During the follow-up of the patient, he was operated with the pre-diagnosis of ileus by general surgery, since there was no clinical and radiological relief with conservative treatment while lying in the service (Picture-3).



Picture 3.

DISCUSSION

Chilaiditi syndrome was first described by Demetrius Chilaiditis in 1910 with three asymptomatic cases(1). Its incidence varies between 0.025% and 0.28%, and its incidence increases with age(2). In the vast majority of cases, there are no symptoms and it is detected incidentally during radiological examinations(3). Symptoms include abdominal pain, nausea, vomiting, constipation, bloating, etc. It may be related to the gastrointestinal system (acute or chronic), as well as non-gastrointestinal systems such as shortness of breath and chest pain(4). It may even be presented in clinics such as ileus, volvulus, perforation, and invagination. (5,6,7). In the formation of hepatodiaphragmatic interposition (Pseudopneumoperitoneum) appearance (chilaiditis); The liver is smaller than normal, abnormalities in the ligamentum falciforme ligament or the absence of this ligament, congenital degeneration in the diaphragm muscle, nervus frenicus paralysis, tuberculosis due to other lung diseases that cause emphysema or intrathoracic pressure increase due to reasons such as swallowing air of the colon causes such as abnormal enlargement, congenital malposition or malrotation of the colon are blamed(8,9,10). There are two main ways of treatment, conservative and surgical. Conservative treatment is the most commonly used method and methods that regulate intestinal peristalsis such as nasogastric tube decompression, diet rich in fiber foods, rest, laxatives and enemas can be considered (5,8). Surgical treatment is usually performed with conservative methods when symptoms do not resolve or complications such as volvulus, invagination, and perforation develop (6, 7). Laparoscopic methods are often preferred in surgery, and methods such as colectomy, colopexy, plication in the diaphragmatic muscle, and hepatopexy are performed. (6,7)

CONCLUSION

In conclusion, this syndrome should be kept in mind in the differential diagnosis of patients with symptoms such as nausea, vomiting, and abdominal pain, which have a high rate of complaints in the reasons of admission to the emergency department, especially because it can be confused with perforation, unnecessary referrals by physicians working in the emergency medicine clinic or new physicians to prevent complications and may occur. it is definitely known.

Informed Consent: Written informed consent was obtained from patient who participated in this study.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

Author Contributions: Conception/Design of Study- E.B., S.S.S.; Data Acquisition- O.B.; Drafting Manuscript- M.F.K.; Critical Revision of Manuscript- M.F.K.; Final Approval and Accountability- G.Y.; Supervision- E.B.

Note: One of the Rare Causes of Abdominal Pain is Chilaiditi Syndrome. It was presented as an oral presentation at the 5th International Critical Care and Emergency Medicine Congress, 14th National Emergency Medicine Congress, Antalya 2018.

REFERENCES

1. Chilaiditi D. Zur frage der hepatoptose und ptose im allgemeinen im anschluss an drei falle von temporärer, partieller leberverlagerung. Fortschr Geb Rontgenstr 1910; 16: 173-208.
2. Plorde JJ, Raker EJ. Transverse colon volvulus and associated Chilaiditi's syndrome: Case report and literature review. Am J Gastroenterol 1996; 91: 2613-6.
3. Orangio GR, Fazio VW, Winkelmann E, et al. The Chilaiditi's syndrome and associated volvulus of the transverse colon: an indication for surgical therapy. Dis Colon Rectum 1986; 29: 653-6.
4. Teng CS, Lin WJ, Tseng MH. et al. Chilaiditi's syndrome in a 9-year old girl with hepato-diaphragmatic interposition of the colon: a short report. Eur J Pediatr 2005; 164: 119-20.
5. Keles S, Artac H, Reisli I, et al. Chilaiditi syndrome as a cause of respiratory distress. Eur J Pediatr 2006; 165: 367-9.
6. Huang WC, Teng CS, Tseng MH, et al. Chilaiditi's syndrome in children. Acta Paediatr Taiwan 2007; 48: 77-83.
7. Barroso Jornet JM, Balaguer A, Escribano J, et al. Chilaiditi syndrome associated with transverse colon volvulus: first report in a pediatric patient and review of the literature. Eur J Pediatr Surg 2003; 13: 425-8.
8. Alva S, Shetty-Alva N, Longo WE. Image of the month. Chilaiditi sign or syndrome. Arch Surg 2008; 143: 93-4.
9. Cetinkaya E, Razi CH, Gunduz M. Chilaiditi's syndrome: case report. T Klin J Pediatr 2004; 13: 33-6.
10. Serdar Moraloğlu, Chilaiditi syndrome: Case report, Journal of Turkish Pediatrics Archive, 2011; 46: 261-3