Scholars Journal of Medical Case Reports **ISSN 2347-6559 (Online)**
Sch J Med Case Rep 2016; 4(7):464-466 **ISSN 2347-9507 (Print)**

(An International Publisher for Academic and Scientific Resources) DOI: 10.36347/sjmcr.2016.v04i07.001

A Giant Hiatal Hernia in Infancy Presented with Bronchiolitis

Esra Akyüz Özkan[1*], Aylin Okur[2], Adem Yaşar[3], F. İnci Arıkan[4]
[1,3,4]Departemnt of pediatrics, [2]Department of Department of Radiology, Bozok University Medical Faculty, Yozgat, Turkey

***Corresponding author**
Esra Akyüz Özkan
Email: esra.akyuz@mynet.com

Abstract: Hiatal hernia is a condition that abdominal organs or the fundus of stomach or both together are herniated towards to mediasten. The symptoms vary according to the severity of the hernia. Small hiatal hernias may cause no problem, whereas larger hernia may cause some symptoms such as heartburn, belching, regurgitation, dysphagia, chest pain and nausea due to acid reflux. In this study we reported an infant with no symptom although having a large hiatal hernia.
Keywords: hiatal hernia, infant, radiography.

INTRODUCTION

Hiatus hernia is defined as a herniation of a portion of the stomach from the esophageal hiatus in the diaphragm to the thorax [1]. Hiatal hernia is a group of diaphragmatic hernia. Diaphragmatic hernia can be congenital or acquired. Acquired diaphragmatic hernias can occur due to trauma [2]. There are 4 types of diaphragmatic hernia. Type 1 hiatal hernia is defined as Sliding type hernia and is the most common type among hiatal hernia. It forms 80-90% of the hiatal hernia. It is formed by passing into the thorax cavity of the portion of stomach especially part of the cardia with gastroesophageal junction due to the expansion of the esophageal hiatus and weakness of the phrenoesophageal ligament. Type 2 hiatal hernia (paraosephegeal or Rolling hernia) is rarer than type 1. There is a local or partial anatomical defect. Type 2 hiatal hernia develops from this defect by thoracic herniation of gastric fundus and there is a real peritoneal hernia sac. Type 3 hiatal hernia is defined as mixt type hernia because it consists of the combination of both type 1 and 2.In this type, along with the fundus of the stomach, lower side of esophagus and cardia part of stomach become herniated into the thorax as well. Because of the slipping into the chest of the gastroesophageal junction, gastroesophageal reflux symptoms can occur. There is a peritoneal sac as type 2. Type 4 hiatal hernia is called as complex type, because beside stomach, other intraabdominal organs can be herniated [3].

In current study an infant with mixt type hiatal hernia is presented, admitted with bronchiolitis and no symptoms regarding hernia.

CASE REPORT

A 5 months male presented with coughing and restlessness. According to the story given by the family, baby was very unrest during the first four months; they were admitted to the doctor and diagnosed with meteorism.

He was born to a 22-year-old mother, at term with caesarean section. Birth weight was 3100 g; height was 50 cm and observed without any pre- or perinatal complication. He didn't have any vomiting attacks. On clinical examination, his body temperature was 36.2°C and heart rate was 110 per minute; weight 6400 g; and height 64 cm. He presented with tachypnea and had rhonchi by listening the lungs. He had no palpable mass or organomegaly and his external genitalia and cardiac examination were all normal. Routine laboratory findings were normal. Inhaled salbutamol was administered due to bronchiolitis. There were suspicious hypodense round views in chest radiograph (Fig. 1). So thorax tomography was performed and mixt type hiatal hernia was diagnosed (Fig 2a, 2b). He was transferred to the pediatric surgery for operation.

Fig-1: AP chest radiography; an opacity superposed with heart, showing some extent to the paracardiac area and air-liquid level

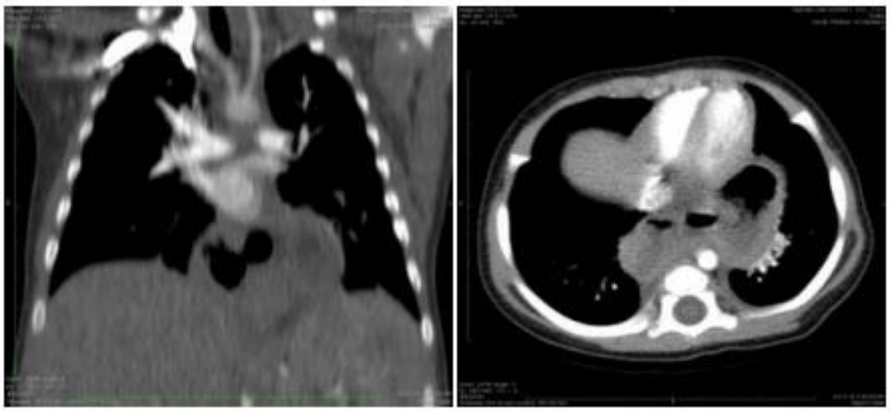

Fig-2: Coronal (A) and axial (B) contrast-enhanced chest CT scans; at the heart posteroinferior, stomach is completely superior to diaphragm; there is a gastric air-liquid level. Gastroesophageal junction cannot be observing in the normal localization (Type 3 hiatal hernia)

DISCUSSION

Paraoesophageal hernia is a condition that abdominal organs or the fundus of stomach or both together are herniated towards to mediasten [4, 5]. The symptoms of hiatal hernia are range from mild dyspeptic complaints to septic shock. Severe symptoms are usually rarely encountered in the majority of patients. According to the degree of herniation, reflux, postprandial chest pain, regurgitation, epigastric pain, vomiting, difficulty swallowing, palpitation, shortness of breath, gastric volvulus, perforation due to strangulation, mediastinitis and septic shock can be seen. The mortality rate is high in toxic clinical status due to gastric perforation. It may rarely lead to gastric volvulus, strangulation and perforation leading to severe chest pain and dysphagia [6, 7].

Hiatal hernia is an unusual cause of dyspnea. There are several studies reported that patients with hiatal hernia presented with dyspnea [8, 9]. In current case our patient had no symptoms regarding hernia and diagnosis of hernia was incidental. The patient diagnosed with mixt type hernia and transferred to the surgery for operation.

Hiatal hernia is usually presented as an air-fluid level behind heart shade in chest X-ray. An elective surgery is usually performed on the symptomatic patients, while an emergent surgery should be performed for the patients with obstruction. Elective surgery is recommended for the asymptomatic patients, because paraesophageal complications may occur without any alarming symptoms such as bleeding, the infarction and perforation [10].

In conclusion, hiatal hernia may be asymptomatic even though large. Patients whose chest X-ray had suspicious opacity, hiatal hernia should kept in mind.

REFERENCES

1. Mittal RK; Hiatal hernia: myth or reality? Am J Med., 1997; 103(5):33-39.

2. Maziak DE, Todd TR, Pearson FG; Massive hiatus hernia: evaluation and surgical management. J Thorac Cardiovasc Surg., 1998; 115(1):53-60.
3. Hennessey D, Convie L, Barry M, Aremu M; Paraoesophageal hernia: an overview. Br J Hosp Med (Lond)., 2012; 73(8):437- 440.
4. Mittal RK; The spectrum of diaphragmatic hernia. Hosp Pract (Minneap), 1998; 33(11):65-66.
5. Weiss CA, Stevens RM, Schwartz RW; Paraesophageal hernia: current diagnosis and treatment. Curr Surg., 2002; 59(2):180-182.
6. Allen MS, Trastek VF, Deschamps C, Pairolero PC; Intrathoracic stomach: presentation and results of operation. J Thorac Cardiovasc Surg., 1993; 105(2):253–259.
7. Sihvo EI, Salo JA, Räsänen JV, Rantanen TK; Fatal complications of adult paraesophageal hernia: A population-based study. J Thorac Cardiovasc Surg., 2009; 137(2):419–424.
8. Waseem M, Bomann S, Gernsheimer J; An unusual cause of dyspnea. J Emerg Med., 2006; 31(1):37–39.
9. Yetman AT, Greenberg SB, Ghaffar S; Diaphragmatic hernia An unusual cause of dyspnea in a patient with marfan syndrome. Pediatr Cardiol., 2003; 24(3):307–308.
10. Wiechmann RJ, Ferguson MK, Naunheim KS; Laparoscopic management of giant paraesophageal herniation. Ann Thorac Surg., 2001; 71(4):1080–1087.