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LETTER TO THE EDITOR / EDİTÖRE MEKTUP

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Morgagni Hernia in a Patient with Seizures

Nöbetleri Olan Bir Hastada Morgagni Hernisi

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To the Editor,

Morgagni diaphragmatic hernia (MDH) is characterized by an orifice in the diaphragm, usually on the right side, that allows herniation of abdominal contents into the thorax[1]. MDH accounts for approximately 3% of all diaphragmatic hernias[2,3]. It typically manifests later in life, either due to respiratory or gastrointestinal issues or as an incidental finding in asymptomatic adults. Diagnosis is confirmed through chest X-rays and computed tomography (CT) scans.

MDH is a rare clinical entity in adults, with no well-documented prevalence or natural history[4]. Predisposing factors such as trauma, obesity, and increased intraabdominal pressure due to chronic cough or constipation can contribute to herniation. However, only 50% of MDH cases present with predisposing factors.

We report a case of a 39-year-old female patient with MDH and epileptic seizures. She presented with worsening dyspnea over several years, exacerbated when lying supine. Her medical history included epilepsy for 17 years, type II diabetes, hypertension, and vitamin B12 deficiency. A heavy smoker for 20 years, she was on levetiracetam for epilepsy and metformin for diabetes. Physical examination revealed decreased breath sounds in the lower right hemithorax. A chest X-ray showed a homogeneous opacity in the right lower lung zone, and a CT scan confirmed the diagnosis of MDH (Figure 1). Pulmonary function tests indicated a mild restrictive ventilatory defect.

The patient underwent successful open surgery for hernia repair (Figure 2), and her postoperative course was uneventful. Follow-up chest X-rays confirmed a normal diaphragm and pulmonary structures (Figure 3). In a one-year follow-up after surgery, the patient reported significant improvement in dyspnea and had no epileptic seizures.

MDH was first described by Giovanni Battista Morgagni in 1761[1]. Among congenital diaphragmatic hernias, Bochdalek hernias are the most common, accounting for about 90% of cases[5]. MDH, which is less common, is predominantly found in females and obese individuals, and is usually located on the right side[2]. CT scans with contrast media are the preferred diagnostic tool for MDH, as they are more sensitive than standard X-rays[3].

There are few case reports linking MDH to neurological or respiratory symptoms. Pattnaik et al.[3] described a female patient with MDH and asthma, whose respiratory symptoms improved after hernia repair. Zisa et al.[4] reported a male patient with both MDH and seizures, suggesting that intra-abdominal pressure related to seizures may contribute to herniation. Acampora et al.[5] also reported a case where

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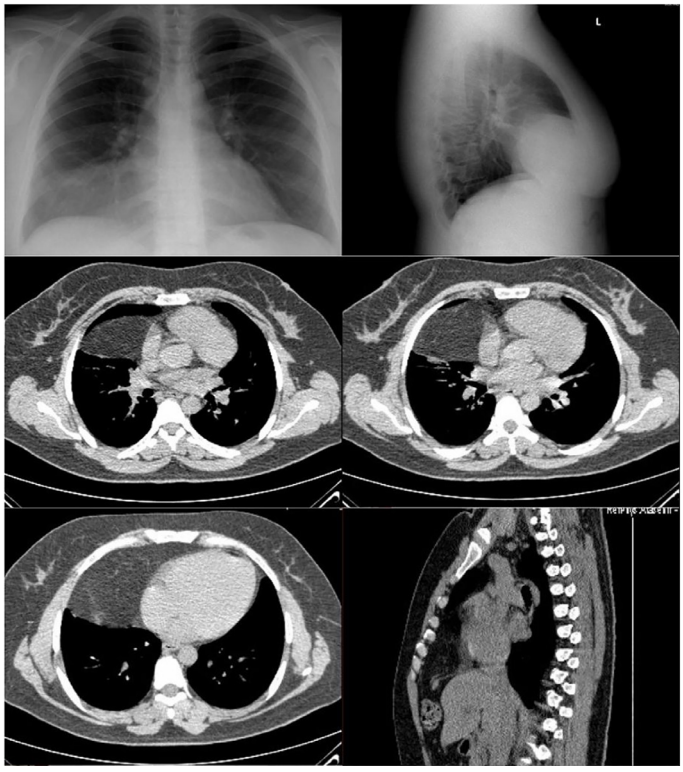

Figure 1. Preoperative posteroanterior, lateral chest X-ray and thorax CT images of the patient

CT: Computed tomography

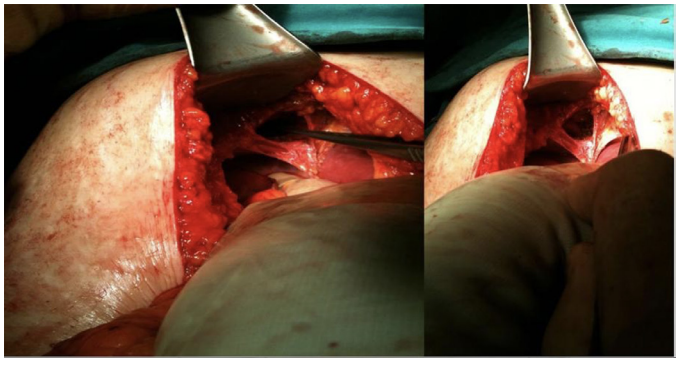

Figure 2. Intraoperative view of the diahragmatic defect due to Morgagni hernia

recurrent convulsive syncope resolved after MDH repair. In line with these findings, our patient's seizures subsided after surgical intervention, suggesting a potential relationship between MDH and seizure activity.

This case contributes to the limited literature on MDH and its possible association with seizures. Surgical repair of MDH in such cases may help alleviate neurological symptoms, and further studies are warranted to investigate this relationship.

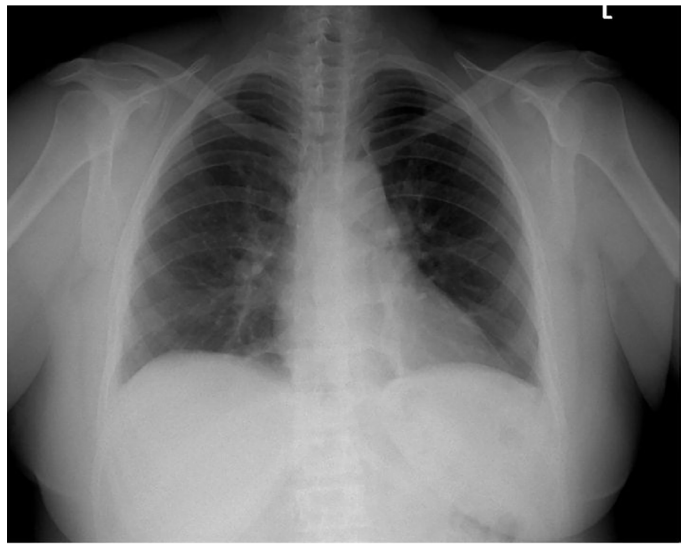

Figure 3. Postoperative posteroanterior chest X-ray of the patient

Footnotes

Authorship Contributions

Surgical and Medical Practices: İ.K., Concept: İ.K., M.E., Design: İ.K., Data Collection or Processing: İ.K., M.E., Analysis or Interpretation: İ.K., M.E., Literature Search: İ.K., M.E., Writing: İ.K.

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