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Rupture of Diaphragm Involving Herniated Viscera Following a Blunt Trauma Diagnosed by Gastrofiberoscopy

We report a delayed diagnosis of a diaphragm rupture found during gastroscopy. A 51-year-old man sustained injuries of the abdomen and chest during a head-on vehicle accident. The patient was diagnosed as suffering from brain concussion and chest wall contusion. He was discharged from hospital on the third day. After 12 weeks he went to general practitioner complaining of dyspeptic symptoms and recurrent vomiting. He reported pain in the epigastrium and lack of appetite. The patient's esophagogastroscopy revealed gastric herniation through the ruptured diaphragm into the thoracic cavity (Figure **1**). The stomach was rotated and markedly elevated. While in hospital, the patient had complained of retrosternal pain. ECG examination revealed nonspecific features of coronary disease. A radiograph showed the stomach within the thoracic cavity (Figure **2**). A laparotomy was performed, and the wound of the diaphragm was sutured. Follow-up was uneventful, there were no cardiac symptoms and the ECG was normal.

In general, tearing of the diaphragm goes unnoticed in 8–12% of cases [1]. A correct diagnosis has been established from 6 days [2] to 34 years after the injury [3]. The difficulty in establishing the initial diagnosis is because of the nonspecific symptoms associated with a ruptured diaphragm which are missed because of the co-existence of other serious injuries which mimic lung disease [4]. The most sensitive diagnostic method is the chest radiograph [5]. Repeated radiograph examination has a higher success rate. We confirm that delayed diagnosis of a ruptured diaphragm does not lead to a worse prognosis [4]. In our opinion, the interesting part of this patient's post-accident course is that the gastric and cardiac complaints could have led to misdiagnosis (e. g. of gastric reflux). We report this case because of the unique manner of diagnosis of the ruptured diaphragm by esophagogastrofiberoscopic examination.

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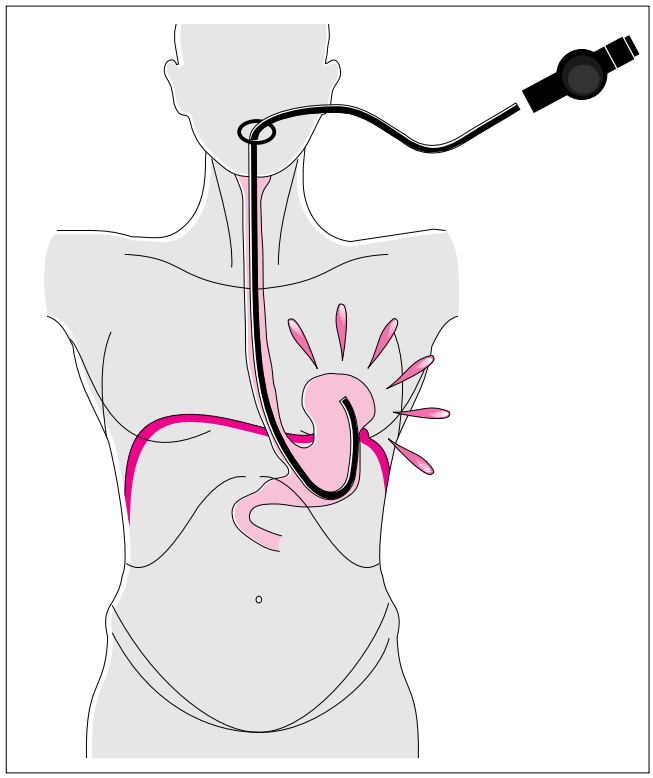

Figure 1 Endoscopy revealed the stomach transferred to the thorax through the ruptured diaphragm

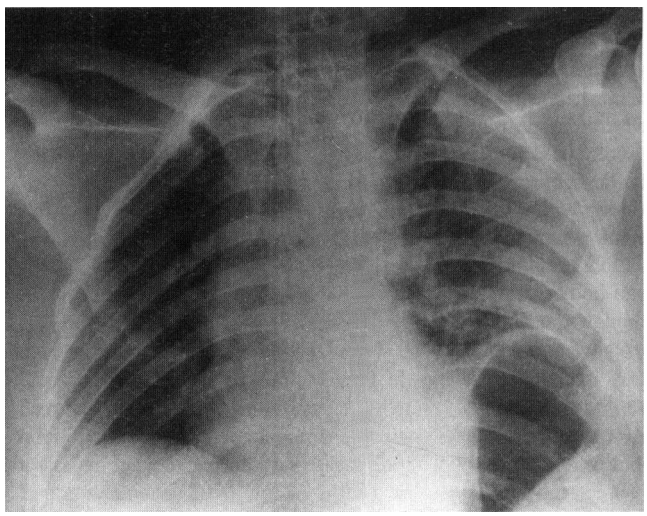

Figure 2 A repeated radiograph 12 weeks after a blunt injury to the abdomen within the thorax, confirming the endoscopic findings of the ruptured diaphragm

References

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