

What Goes up Must Come Down: An Early Recurrence of an Intrathoracic Stomach Migration One Day after Surgery

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Abstract

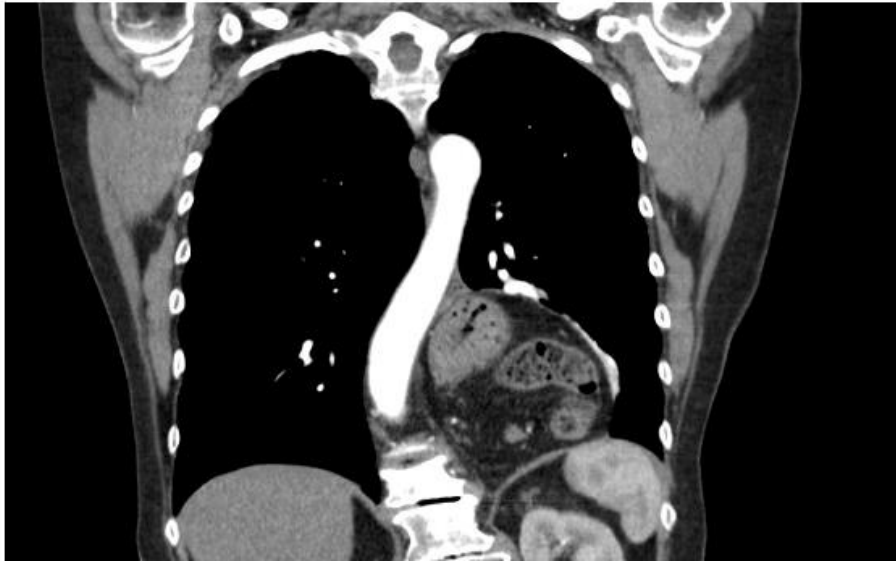
An intrathoracic stomach is an extreme form of paraoesophageal or mixed hiatal hernia of ten times asymptomatic or presenting with non specific symptoms. The acute case of an intrathoracic stomach through a smaller diaphragm defect, leading to possible ischemia, could be life threatening. In this case were port a 70-year-old woman presenting initially with a CT-scan diagnosis of an intrathoracic stomach and an enterothorax (transverse colon) for elective laparoscopic hernia repair and reposition. The main symptoms being shortness of breath on exertion, dysphagia and a long history of reflux esophagitis. On the first post-operative day the patient suffered acute shortness of breath, a work-up showed an early recurrence of the intrathoracic stomach through the intact repaired esophageal hiatus. An emergency laparotomy was performed.

Introduction

An early recurrence of the upside-down stomach on the first post-op patient presented with an intrathoracic stomach and transverse colon, which were diagnosed on CT-scan after a long history of shortness of breath on light exertion and dysphagia, for elective laparoscopic repositioning and repair operative day with acute shortness of breath, led to an emergency surgical intervention.

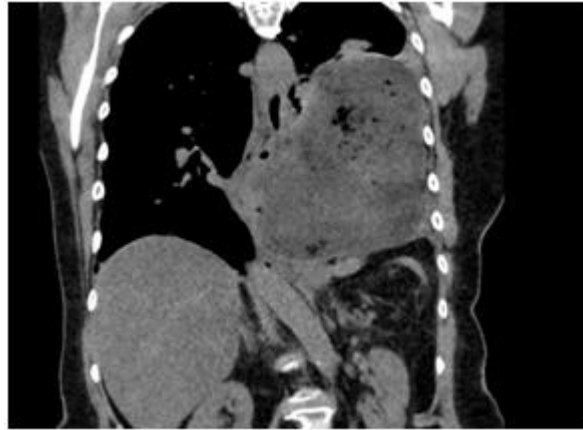
Case Presentation

Here we present the case of a 70 year old patient who initially presented in our clinic with a CT diagnosis of an upside-down stomach and enterothorax (**Figure 1**). The patient states that a hiatal hernia was diagnosed with gastroscopy approximately 15 years ago with typical reflux symptoms for the past years. In the two months prior to the CT scan, the patient developed shortness of breath on light exertion, abdominal pain with bloating and productive cough. The patient has a history of arterial hypertension and past surgical history of thyroidectomy and a diagnostic laparoscopy.



During the laparoscopic surgery, after distal oesophageal mobilization and reposition of the stomach and transverse colon as well as resection of the hernial sac, we noticed a short oesophagus with the lower esophageal sphincter lying approximately 1,5 cm below the hiatus. The hiatal defect was closed with three dorsal non-absorbable sutures and a left lateral fundophrenicopexy with three suture were performed. During the morning rounds on the first post operative day, the patient was seen setting up using only her abdominal muscles and explained how she felt a sudden sharp pain in the thoracic cavity and shortness of breath after bending over to take her shoes out from under the bed. A chest x-ray was performed showing an unspecific finding suspicious of a pneumatocele (**Figure 2**). A CT-scan showed an early recurrence of the upside-down stomach with a liquid filled stomach (**Figure 3**).





To avoid a possible ischemia, emergency laparotomy was performed where the recurrence showed to have happened through the intact esophageal hiatus. We performed a reposition after opening up the hiatal sutures and a collis-hunter wedge fundectomy with a left lateral fundophrenicopexy combined with a ventral Boerema gastropexy to the abdominal wall.

Discussion

All patients undergoing an operation on the hiatus should be well informed prior to surgery about the importance of avoiding abdominal wall exertion and strain [1]. Strict patient compliance is a must in the case of an upside-down stomach. In the case of our patient intraoperatively, during the revision surgery, the stomach had around 1,5 L of soup, water and juice that the patient drank during the first 24 hours after surgery despite being well informed not to do so. The lack of compliance seen in this case is believed to be a main factor for this early recurrence [2].

To avoid a new recurrence with potentially life threatening complications, in the case of a previously diagnosed short oesophagus, we decided to perform a collis-hunter wedge fundectomy to prolong the esophagus before fixating the stomach to the diaphragm with a lateral fundopexy and to the abdominal wall in a Boerema technique, the hiatal hernia was closed again with two dorsal sutures and one ventral suture. Before closing the abdomen a nasogastric tube was placed [3]. Post operatively the patient was put on a strict npo regimen and avoiding abdominal wall exertion was discussed with the patient again. Five days after the revision surgery a gastrografin swallow was performed (Figure 4) which showed an intact hiatus and no contrast leak. The nasogastric tube was removed and a traditional progression of a clear liquid diet to a full liquid diet, to a soft diet, and finally to a regular diet was initiated. We discharged our Patient 7 days after the revision surgery [4].



The patient presented for routine check-up 3 months postoperatively and denies having shortness of breath or dysphagia. On the other hand, multiple reflux episodes per week without taking PPIs are reported. A control gastrograffin swallow was performed and showed an intra abdominal stomach with an intact hiatus. No reflux is seen upon valsalva maneuver (**Figure 5**).



At six months postop the patient denies having reflux symptoms under 20 mg pantoprazolqd, with a satisfying quality of life (GIQLI by Eypasch was filled by the patient showing a 107 point score).

Conclusion

The ventral gastropexy combined with a collis-hunter wedge fundectomy seems to be a safe procedure in the recurrence of an upside down stomach in the non compliant patient. After all what goes up must come down, and in this particular case, stay down. Regarding the post operative reflux more studies are needed to try and assess the quality of life of the patients after combining those two procedures.

References

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