Boerhaave Syndrome Complicated by Undiagnosed Gastroesophageal Junction Outlet Obstruction: A Case Report

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INTRODUCTION

Boerhaave type esophageal rupture is a condition carrying high morbidity and mortality, necessitating emergency intervention. Along with appropriate resuscitation and drainage, accepted definitive therapy aims for either open transpleural primary closure, placement of an endoluminal covered stent, or sometimes a combination of both strategies. Only in very rare cases does a rupture occur exclusively within the abdomen, without violation of either pleural space.

We present a case in which the patient's vague history and current imaging suggest undiagnosed gastroesophageal junction outflow obstruction (GEJOO), possibly achalasia, which in large part contributed to his rupture. Also unusual is the isolation of the spontaneous tear to the abdomen. In this case we detail the integration of strategies to repair his injury, protect the repair, and help prevent recurrence of dysphagia or rupture.

CASE SUMMARY

A 64-year-old, relatively healthy nonsmoker male presented with six hours of chest pressure after having choked on chicken meat and then retched extensively. During the present admission, he was tachycardic, in visible distress with pallor and diaphoresis, with a distended and tender abdomen, without peritonitis. Computed Tomography (CT) esophagram revealed a very tortuous and dilated esophagus with tight narrowing at the gastroesophageal (GE) junction, contrast spillage in the lower right epigastrium, and extensive free air in the retroperitoneum and abdominal space.

DISCUSSION

Esophageal rupture most commonly occurs due to iatrogenic causes, while about 15% of cases involve Boerhaave type injury induced by forceful vomiting. This type of rupture, isolated to the abdomen, is exceedingly uncommon; in one of the largest worldwide meta-analyses of 75 studies, involving 2,971 patients over 12 years, only 77 patients were identified to have had abdominal involvement. Meanwhile, we find only a single case describing achalasia-related injury, in which an elderly female suffered an intrathoracic rupture, was treated with multiple stents, and succumbed to her condition within one month.

CONCLUSION

Herein we have presented a patient with a life-threatening, spontaneous type of esophageal tear, with the complicating feature of a previously underestimated GEJOO. Prompt recognition of his acute injury, along with identification of his esophageal anatomy, allowed for a technically feasible repair, with very smooth, early and midterm recovery.