

CLINICAL IMAGE

Pancreatic pseudocyst with mediastinal extension: a rare cause of hiatal hernia

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MANUSCRIPT

A 55-year-old man with a history of acute pancreatitis 6 months ago was admitted with symptoms of epigastric pain, chest tightness, dysphagia, weight loss and fatigue. Symptoms started a month ago and gradually worsened over the past week. Computed tomography (CT) images showed a cystic structure extending from the pancreatic tail through the esophageal hiatus of the diaphragm into the mediastinum. This cystic mass was 75 × 79 × 135 mm in size and had a rhombohedral shape with a light, irregular wall with thickness of about 3–5 mm. This cystic mass was located posteriorly to the esophagus and stomach, compressing the esophagus, and pushed the heart forward (Fig. 1). The final diagnosis was para-esophageal hernia of pancreatic pseudocyst based on the history, clinical presentation and imaging studies. The patient underwent a successful laparoscopic cystogastrostomy and paraesophageal hernia repair. At the 6-month follow-up, he showed improvement with a good appetite and weight gain.

Mediastinal pancreatic pseudocyst is a rare complication of acute or chronic pancreatitis and was first described in 1951 [1]. Mediastinal pancreatic pseudocysts are formed after rupture of the pancreatic duct into the retroperitoneal space and the pancreatic fluid moves into the mediastinum through the aortic or esophageal hiatus, resulting in clinical symptoms [2]. The treatment principle includes the management of pseudocyst, such as total excision with internal or external drainage via percutaneous, endoscopic, laparoscopic or open surgery (cystogastrostomy, cystojejunostomy, cystoduodenostomy or cystoholecystostomy) procedures [1–3]. Surgical approaches to paraesophageal hernia repair include laparoscopic, transabdominal, or transthoracic surgery [3]. The case of our patient revealed that nasopancreatic, transgastric or transesophageal endoscopic drainage was possible. However, the treatment was based on the experience and the equipment conditions of the hospital, so laparoscopic surgery had been applied to cystogastrostomy and hernia repair.

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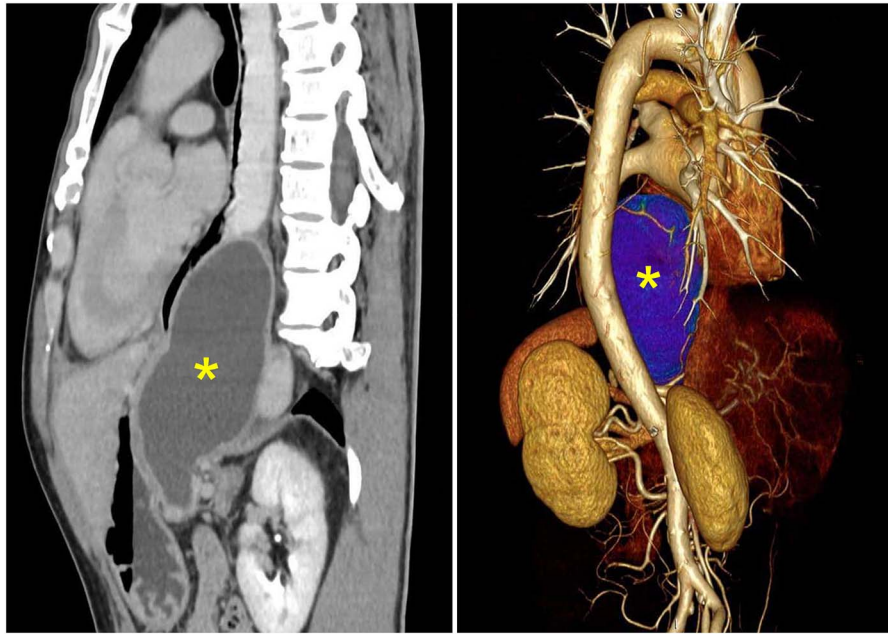


Figure 1: Sagittal and 3D-reconstruction CT images show a cystic structure extending from the pancreatic tail through the esophageal hiatus of the diaphragm into the mediastinum; this mass is located posteriorly to the esophagus and stomach, compressing the esophagus, and pushed the heart forward.

FUNDING

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CONFLICT OF INTEREST

None declared.

ETHICAL APPROVAL

No ethical approval required.

CONSENT

Informed consent was obtained from the patient.

GUARANTOR

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REFERENCES

1. Drescher R, Köster O, Lukas C. Mediastinal pancreatic pseudocyst with isolated thoracic symptoms: a case report. *J Med Case Rep* 2008;2:180. <http://doi.org/10.1186/1752-1947-2-180>.
2. Patel S, Shahzad G, Jawairia M, Subramani K, Viswanathan P, Mustacchia P. Hiatus hernia: a rare cause of acute pancreatitis. *Case Rep Med* 2016;2016:2531925. <http://doi.org/10.1155/2016/2531925>.
3. Boyce K, Campbell W, Taylor M. Acute pancreatitis secondary to an incarcerated paraoesophageal hernia: a rare cause for a common problem. *Clin Med Insights Case Rep* 2014;7:25–7. <http://doi.org/10.4137/CCRep.S13079>.