Pancreatic duct injury secondary to pancreatic trauma successfully treated with transgastric pancreatic drainage

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INTRODUCTION

- Disconnected pancreatic duct syndrome (DPDS) is an underrecognized complication of pancreatic trauma and acute pancreatitis.
- DPDS is characterized by a disruption of the main pancreatic duct. Its diagnosis is confirmed by either MR cholangiopancreatography (MRCP) or retrograde cholangiopancreatography (ERCP).
- In this case, we present a patient who developed DPDS secondary to blunt abdominal trauma, successfully treated with a transgastric pancreatic drainage.

CASE PRESENTATION

A 36-year-old female with a medical history of renal dysplasia and chronic kidney disease stage V arrived at our institution after presenting with epigastric abdominal pain, nausea, and early satiety of a week of evolution. The patient was recently discharged from a trauma center after being admitted for two weeks after a domestic

The patient was recently discharged from a trauma center after being admitted for two weeks after a domesti violence incident involving blunt abdominal trauma. Upon initial evaluation, the abdominal exam was remarkable for tenderness in the epigastric area upon deep palpation.

Laboratory were remarkable for elevated renal parameters and severely elevated pancreatic enzymes. Initial Abdominopelvic CT showed pancreatic transection across the head and neck pancreatic junction, with an associated fluid collection consistent pancreatic fluid extravasation. MRCP was performed, which confirmed the pancreatic transection with an associated pseudocyst at the pancreatic genu consistent with disconnect pancreatic duct syndrome.

After interdisciplinary evaluation, an endoscopic ultrasound-guided cystgastrostomy stent was placed. After the procedure, the patient significantly improved symptoms and was discharged two days later. The patient was re-evaluated two weeks later with a CT scan, which showed transgastric pancreatic drainage with complete resolution of peripancreatic fluid collection.

Transgastric pancreatic drainage was removed two months later. Follow up Ct scan done two months after stent removal showed normal anatomy of the pancreas with no distinct inflammatory tissue reaction and no evidence of peripancreatic collection.

IMAGES











DISCUSSION

Pancreatic ductal injury after trauma is mainly managed surgically but may result in high morbidity and mortality. Advances in endoscopy have allowed minimally invasive interventions as an alternative that can be performed in an effective and safe manner.