

plasma exchange. CMV and tacrolimus have been shown to be associated of TTP.^{4,5} TTP should be suspected in presence of microangiopathic hemolytic anemia and thrombocytopenia in absence of other identifiable causes and a high index of suspicion is necessary for timely diagnosis and management.

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Double Papilla of Vater

Abnormal rotation and recanalization during embryologic development can lead to variation in pancreatobiliary ductal anatomy. Usually, the bile duct and pancreatic duct join together at the level of duodenum to form papilla of Vater. During embryogenesis, complete non-union of distal bile duct and ventral pancreatic duct give rise to separate orifice of these two ducts as double papilla. It is a very rare condition and only few cases have been reported in literature.¹⁻⁴

Case Report

A 60 years female presented with right upper abdominal pain 9 months back and on evaluation was found to have a large hydatid cyst. She underwent exploratory laparotomy and enucleation of the hydatid cyst in another hospital. Post operatively, patient developed bilioma which was drained by percutaneous catheter drainage (PCD). Patient presented to us with persistent drainage of bile through the PCD. On evaluation hemogram and biochemical parameters were as follows: hemoglobin-12.2g/dl, total leucocyte count (TLC) - 9900/mm³, platelet count-173x10³/mm³, bilirubin-0.7mg/dl, AST-21 U/L, ALT-15 U/L, APL-182 U/L. Her renal function and coagulogram were normal. In view of persistent bile leak, the patient was taken up for endoscopic retrograde cholangiopancreatography (ERCP), and during the procedure two separate papillary openings were identified (**Figure 1**). The cranial orifice was located at 11 o'clock position and the caudal orifice was at 7 o'clock position. Selective cannulation of the cranial orifice (biliary orifice) was done (**Figure 2**) and contrast injected. Following that, only common bile duct was opacified and no opacification of the main pancreatic duct was observed. Cholangiogram revealed leakage of the contrast from the right ductal system (**Figure 3**). A 7 Fr 7 cm double pigtailstent was placed in the biliary system and following that patient had marked improvement in her symptoms with reduction in the drain output.

Discussion

The apertures of pancreatic and bile ducts opening into the duodenum is called the ampulla of Vater. It is



Figure 1: Double major papilla with two separate orifices.



Figure 2: The proximal orifice selectively cannulated and contrast injection opacifies the bile duct only.

developed early in the 7th week of gestation by fusion of the biliary and pancreatic ducts in closed cavities of the duodenum.⁵ Fusion of the biliary and pancreatic duct can give rise to 3 different patterns of pancreatico-biliary ductal opening: a common duct where both the duct open into a single opening, separation of the two ductal opening by a partition and complete separation of the two ductal opening giving rise to so called double papilla.⁶ Double papilla is a very rare condition with one series reporting its incidence to be 0.18% of patients undergoing ERCP.⁴ In double papilla, the proximal opening drains the bile duct whereas the distal opening drains the pancreatic duct. The bile duct orifice is always located at the upper left of the pancreatic duct orifice.⁶ This entity usually does not predispose to any disease except for the occasional report of increased risk of bile duct stone due to stasis.⁷ It also require a differential diagnosis from secondary choledochoduodenal fistula. It is important that the endoscopists are aware of this rare variation so as to prevent unnecessary manipulation of the pancreatic duct and consequent increased risk of post-ERCP pancreatitis. Also, correct identification of the bile duct orifice will virtually exclude the risk of post - ERCP pancreatitis as the pancreatic duct manipulation is avoided because of a separate duct opening.



Figure 3: Cholangiogram: Leak from the right ductal system. Percutaneous catheter is also noted.

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Esophageal Actinomycosis, A Rare Complication After Self-Expanding Metallic Stent Deployment

Actinomycosis is a rare, sub-acute to chronic bacterial infection caused by Actinomyces species which are facultative, anaerobic, gram positive bacilli. It is most frequently caused by species Actinomyces israelii. They are mainly present as saprophytes in the soil. In humans, they can occur as commensals of the oral cavity, gastrointestinal tract and vagina. Actinomycosis is

preceded by some known insults to the native mucosa. It is characterized by contiguous spread, granulomatous inflammation and formation of multiple abscesses and sinus tracts that may discharge sulphur granules. Though Actinomyces infection can occur in abdomino-pelvic, pulmono-thoracic and cervico-facial areas, oesophageal involvement is an extremely rare occurrence in immunocompetent persons. Here we report a rare case of oesophageal actinomycosis in a 50-year-old lady, following the deployment of a partially covered Self Expanding Metallic Stent (PCSEMS) elsewhere for an indeterminate mid oesophageal stricture. It is noteworthy that this is the first case following oesophageal metallic stenting, reported from India.

Case Report

A 50 year old lady presented with a history of progressive dysphagia to solids and liquids for the past 3 months. Four months ago, she was diagnosed to have an oesophageal stricture at 25 cm, for which a PCSEMS was deployed elsewhere as it was considered malignant.

On physical examination, she was thin built and malnourished. Her blood investigations showed low haemoglobin of 85 g/L and serum albumin of 28 g/L. The oesophagoscopy revealed a proliferative circumferential tissue overgrowth at 20 cm at the proximal end of PCSEMS narrowing the lumen not admitting the endoscope further (**Figure 1**). Biopsy was taken from the tissue in-growth.

Computed Tomography of the chest revealed an oesophageal metallic stent in the mid and lower third of oesophagus with tissue in-growth into the proximal end of the stent and wall thickening in the mid third of the oesophagus (**Figure 2A & 2B**). The biopsy and histological examination showed discrete sulphur granules within the granulation tissue in the ulcerated oesophageal tissue consistent with infection by Actinomyces species (**Figure 3A**).

This patient was treated with a course of intravenous penicillin-G for a month. She had good relief of chest pain and odynophagia with partial alleviation of dysphagia. She was reassessed with upper GI scopy which revealed partial regression of hyperplastic tissue overgrowth. Repeat biopsy from the hyperplastic tissue