Apollo Cancer Centres

Portal annular pancreas – A real challenge in patients undergoing Whipples' pancreatico duodenectomy

A 55-year-old male patient, k/c/o diabetes was diagnosed with obstructive jaundice due to periampullary cancer. The patient underwent Endoscopic retrograde cholangiopancreatography (ERCP) and biliary stent followed by 6 cycles of neoadjuvant chemotherapy (mFOLFIRINOX). He had to undergo re-ERCP twice in between due to stent blockage, then planned for Whipples' procedure. He underwent exploration elsewhere and declared inoperable because. However, there was no peritoneal disease. Thereafter, the patient defaulted and was taking some ayurvedic treatment, following which he was diagnosed with Gastric outlet obstruction after six months.

When he came to Apollo Cancer Centres, we reviewed the case, pre and post NACT scans were studied, and disease was found to be clearly resectable having clear planes with major vessels. A PET-CT scan revealed localised resectable disease. There were high levels of CA 19-9 (8000 IU/ml) and all the 3 imaging tests clearly demonstrated Portal annular pancreas (congenital abnormality of the pancreas).

Although clearly resectable, challenges were high levels of CA 19-9 in absence of jaundice. In view of high CA 19-9, to assess the biology of the disease, it would have been better to give systemic therapy before surgery. Since the patient was in gastric outlet obstruction with previous history over 1 year, it was decided to do trial resection SoS triple bypass as there was peritoneal disease.

Patient underwent Colowhipples and intraoperative course was uneventful. Postoperatively, he developed Re-feeding syndrome, which was managed conservatively, following which his recovery was smooth and uneventful.

Portal annular pancreas is uncommon and neglected entity. It is very important to notice it on preoperative scans as surgical strategies are different here and if unnoticed, it can lead to catastrophic events during or after surgery. It also emphasizes the importance of specialised care systems for complicated HPB surgeries. For instance, in the current case scenario, the condition was not detected in the initial presentation and labelled as BRPC, so NACT was given. Again when surgery was planned, dissection in wrong plane resulted in bleeding leading to abandoned procedure. Fortunately, patient was still resectable but the extent of surgery had increased from Whipples to Colo-Whipples, and also led to the risk of the morbidity associated with it.

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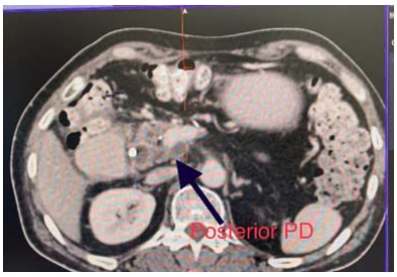
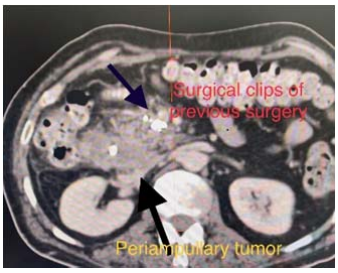
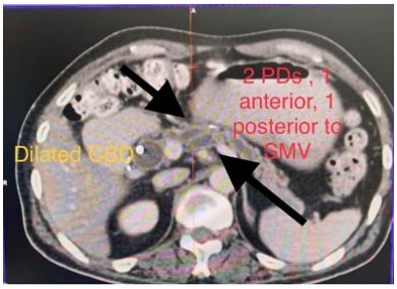

Posterior PD


Surgical clips of previous surgery
Periampullary tumor


2 PDs , 1 anterior, 1 posterior to SMV
Dilated CBD