

Question 22 – Week of April 5

50-year-old white man without any prior medical problems is found to have cholestatic jaundice and elevated transaminases. CT scan of abdomen revealed a 4cms pancreatic head mass. ERCP revealed a biliary stricture that was bypassed with a plastic stent. Later, a staging EUS suggested invasion into the portal vein without involvement of the superior mesenteric artery or vein. Which if the following statements is false.

- A. New onset diabetes is not uncommon in pancreatic cancer.
- B. Pre-operative biliary drainage may be associated with poor surgical outcome.
- C. This patient is inoperable and will require a metal stent in the future.
- D. Five year survival after a Whipple's surgery is at 10-25%.
- E. There is a 40% lifetime risk of pancreatic cancer in hereditary pancreatitis.

Answer: C

New onset diabetes in pancreatic cancer is well described in the literature. A recent case control study has reinforced this where in pancreatic cancer cases had new onset diabetes in 52% when compared to controls 23%. Most surgical literature suggests a poor surgical outcome after preoperative biliary drainage however this is still controversial. Recent changes in TNM staging criteria consider invasion of portal vein a T3 lesion which is still considered operable. This is however dependant on the local surgical expertise in portal vein reconstruction. Invasion of the superior mesenteric artery is considered a T4 lesion and is mostly inoperable. Pancreatic cancer is usually diagnosed late and even in patients with a total pancreaticoduodenectomy the five year survival rate is 10-25%. Hereditary pancreatitis is highly associated with development of pancreatic cancer with lifetime risk approaching 40%.

References:

1. Pancreatic cancer-associated diabetes mellitus: prevalence and temporal association with diagnosis of cancer. *Gastroenterology*. 2008 Jan;134(1):95-101.
2. Surgical outcome after pancreaticoduodenectomy: effect of preoperative biliary drainage. *Hepatogastroenterology*. 2006 Nov-Dec;53(72):944-6
3. Preoperative biliary drainage for periampullary tumors causing obstructive jaundice; Drainage vs. (direct) Operation (DROP-trial). *BMC Surg*. 2007 Mar 12;7:3.
4. Howard TJ, Villanustre N, Moore SA, et al. Efficacy of venous reconstruction in patients with adenocarcinoma of the pancreatic head. *J Gastrointest Surg* 2003;7 : 1089–1095.
5. Hereditary pancreatitis and the risk of pancreatic cancer. International Hereditary Pancreatitis Study Group. *J Natl Cancer Inst*. 1997 Mar 19;89(6):442-6.