A Peculiar Problem in PSCC

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Introduction

Primary squamous cell carcinoma of the pancreas (PSCC) is a rare cause of pancreatic malignancy accounting for <5% of all instances of pancreatic malignancy [1]. There is a paucity of cases documented in literature and none that have presented with a gastric outlet obstruction leading to gastric perforation. PSCC is a more aggressive subtype of pancreatic malignancy conferring a much more dismal prognosis than the more recognized pancreatic adenocarcinoma 25.61%[2] vs 77.81%[3] respectively.

Case Summary

We present a 95-year-old female with an oncological history of high-grade papillary bladder cancer who presented for abdominal pain and vomiting lasting 3 days. The patient did not have any history of tobacco or chronic alcohol use. She did however have a strong familial history of malignancy with ovarian cancer in her mother and sister as well as breast cancer in her daughter. On exam, her abdomen was markedly distended and firm but completely nontender to palpation. Labs were notable for a lipase >1000, ALP 1,014, ALT 174, and AST 319. CT abdomen without contrast was obtained demonstrating a 5.4cm pancreatic mass with marked upstream dilatation of the duodenum and stomach. Based on these results, the patient was made nothing by mouth and a nasogastric tube (NGT) was successfully placed for gastric decompression. Esophagogastroduodenoscopy was performed on second day of admission significant for extensive duodenitis with multiple clean based ulcerations, extensive mucosal edema with focal luminal narrowing of the duodenum, and distal LA grade D esophagitis. Duodenal tissue samples did confirm squamous cell carcinoma via direct extension from the pancreas. An additional CT abdomen was obtained one day after NGT removal and three days after endoscopy which showed pneumoperitoneum with focal defect at the pyloric antrum. The patient ultimately opted for hospice and was transitioned to DNR with withdrawal of care.

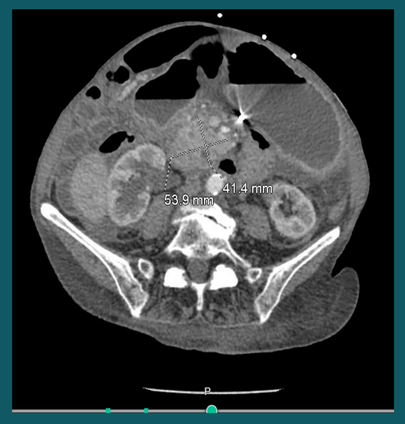

Figure 1: CT abdomen pelvis with contrast sagittal view showing 5.4cm pancreatic head mass on presentation

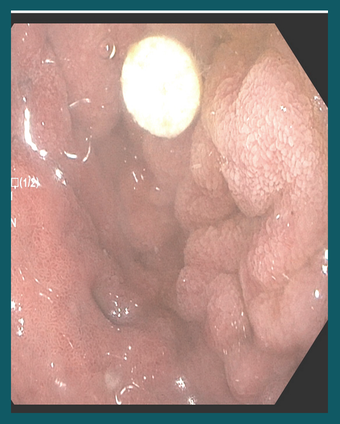

Figure 2: EGD findings of erosive duodenitis and duodenal luminal narrowing from biopsy confirmed PSCC

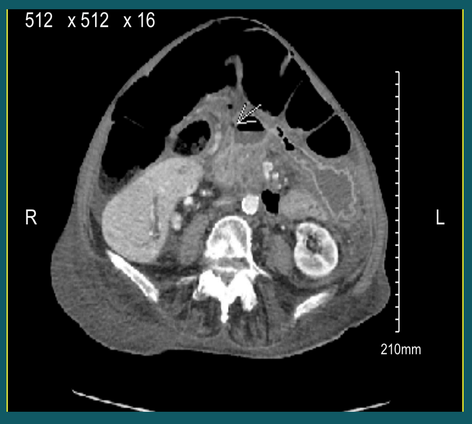

Figure 3: CT abdomen pelvis with contrast showing pneumoperitoneum with focal defect in stomach

Discussion

1. The pancreas itself is typically bereft of squamous cells making the diagnosis of squamous cell carcinoma in the pancreas exceedingly rare with one estimation describing <1% of all pancreatic malignancy however the true number may lie somewhere between 0.5-5%[1].
2. It is currently hypothesized that PSCC arises from metaplasia of the pancreatic ducts. It is not uncommon to see small amounts of squamous cell metaplasia of the ducts during period of inflammation especially long and frequent periods such as chronic pancreatitis[4]. There has been no study to evaluate the hazard ratio of PSCC in those with chronic pancreatitis vs those without
3. There are other estimated risk factors which are not unlike risk factors for adenocarcinoma of the pancreas such as age, sex, tobacco use history all of which have never been validated [2]. Further studies are needed to establish clear factors predisposing patients increased risk of developing PSCC

References:

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