A Highly Unusual Case of Metastatic Pancreatic Adenocarcinoma

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A Highly Unusual Case of Metastatic Pancreatic Adenocarcinoma
Zachary A. Koehn, D.O.; Lauren S. Piper, D.O.

Introduction
Pancreatic cancer is a rare malignancy, with nearly a 100% mortality rate. The average lifetime risk of developing it is about 1.5%. The strongest risk factor for pancreatic cancer is advanced age; the median age of diagnosis is 70. Here we discuss a case of pancreatic cancer in a 32 year-old woman.

Case Report
S.R. is a 32 year old female presenting with new-onset jaundice. Two months prior to presentation, she reported vomiting and LUQ pain, and was found to have *H. pylori* infection. She completed treatment with triple therapy and her nausea resolved. However, over the next two months she developed early satiety, leading to a 35 lb weight loss. Over the last week she noticed yellowing of her skin, RUQ pain, and clay-colored diarrhea. Her past medical history is negative except for a 10-pack-year smoking history. Exam revealed a cachectic, jaundiced woman with hepatomegaly and scleral icterus. Pertinent labs are shown in Table 1. Abdominal CT showed ill-defined margins to the pancreatic body and tail, as well as innumerable hypodense lesions throughout the liver and distended gallbladder (Figures 1 and 2). Interventional radiology performed a liver biopsy, which was consistent with CA19-9-positive metastatic pancreatic adenocarcinoma. She started palliative chemotherapy and died four weeks later.

<table>
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<tr>
<th>Table 1: Lab Findings</th>
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<td>AST 129</td>
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Discussion
This case was noteworthy given the patient’s young age and apparent lack of risk factors. The incidence of pancreatic cancer in patients under 40 is unknown, but considered highly unusual in the literature. Because of its rarity, younger patients are often diagnosed at more advanced stages with lower survival rates. The strongest known risk factors for developing pancreatic adenocarcinoma include diabetes, smoking, obesity, advanced age, and family history of pancreatic cancer. Smokers have almost a twofold increased risk compared with nonsmokers, and risk increases with cumulative exposure. Additionally, *Helicobacter pylori*, a proven bacterial carcinogen, has been linked in some studies to pancreatic cancer. In a Finnish study of male smokers, participants who tested positive for CagA *H. pylori* strains were twice as likely to develop pancreatic cancer compared to their seronegative counterparts. Our patient’s only risk factors were her smoking history and *H. pylori* infection. Therefore, one should consider pancreatic cancer even in younger patients with classic symptoms and known risk factors. Moreover, further investigation is needed to help identify those at risk of developing pancreatic cancer at a young age.

References
Venerito, M et al. “Helicobacter and Gastrointestinal Malignancies.” Helicobacter. 2015 Sept 20. 36-39