

## CLINICAL VIGNETTE

# A 55-Year-Old Woman with a Curious Itch

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A 55-year-old woman presented to primary care with diffuse itching for four weeks. Prior medical history includes depression and anxiety, postmenopausal vasomotor symptoms on hormone replacement therapy, and polycystic ovary syndrome. For the past month she reports itchiness throughout her body including her arms, neck, back, and torso. The itching started on her arms, and then spread. She denies any new medications and or new environmental exposures. She tried an over-the-counter eczema cream without improvement. She denies fevers, malaise, nausea, or respiratory symptoms and does not have a history of seasonal allergies. On exam, there are faint excoriations on her arms indicative of scratching. There are no rashes on exam, no jaundice or icterus, no increased warmth on her skin. There is no cervical lymphadenopathy, and scratching a line on her forearm does not produce a raised erythematous line, no dermographism.

With no identified cause of itching, labs were ordered and Cetirizine 10mg started. Lab results were notable for elevated transaminases AST 88 [8 to 33 U/L], ALT 177 [4 to 36 U/L], Alkaline Phosphatase 373 [44 to 147 IU/L], and total bilirubin 1.5 [0.2 and 1.3 mg/dL]. These were normal one year prior. MRI abdomen with and without contrast was scheduled and revealed severe diffuse biliary dilatation. She undergoes EGD/EUS/ERCP with biliary sphincterectomy, biopsy and placement of a plastic biliary stent. Pathology reveals moderately differentiated ampullary adenocarcinoma. She undergoes a Whipple procedure (pancreaticoduodenectomy) with pathology indicating pT1bN0 ampullary adenocarcinoma, pancreaticobiliary type, measuring 0.8cm in diameter.

Ampullary adenocarcinoma arises from the ampulla of Vater where the pancreatic duct and bile duct meet and empty into the duodenum.<sup>1</sup> It is a rare cancer, representing less than 1% of gastrointestinal cancers. Based on histopathology, it can be classified into intestinal (from the intestinal epithelium of the ampulla), pancreaticobiliary (from the epithelium of the distal pancreatic and cystic ducts), and mixed.<sup>1</sup> Ampullary cancers are often confused with periampullary cancers, which originate in the pancreas, bile duct, or intestines close to the ampulla of Vater. Surgical treatment, Whipple procedure, is the same for ampullary and periampullary tumors, but the outcomes vary widely. Over 80% of ampullary carcinomas are resectable with a 5-year survival of 30-50%, which is much higher than cholangiocarcinoma and pancreatic cancer.<sup>2</sup> Chemoradiotherapy currently plays a large role in ampullary cancer treatment. There is increasing recognition that ampullary adenocarcino-

mas have heterogeneous genomic mutations which lead to more targeted future therapies.<sup>3</sup>

### Conclusion

In this case, we meet a woman who presents with persistent pruritis of prolonged duration. The absence of a rash and lack of response to antihistamines or topical steroid were peculiar to her primary provider, so workup was expanded to evaluate her bloodwork, which revealed novel transaminitis. Subsequent imaging and pathology revealed a diagnosis of ampullary adenocarcinoma of pancreaticobiliary type.

### REFERENCES

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