

## Question 24 – Week of April 19

A 22-year-old woman recently immigrated from South India is evaluated for epigastric abdominal pain. She had a history of recurrent bouts of abdominal pain with nausea from the age of 12 and had been at various times diagnosed with dyspepsia but had essentially normal upper endoscopies in India. Her CT scan of the abdomen here showed a dilated pancreatic duct with ductal and parenchymal stones suggestive of chronic pancreatitis. She had no history of ETOH intake and abdominal ultrasound was negative for gallstone disease. There was no abuse of medications and family history was negative for pancreatitis. She was diagnosed with tropical pancreatitis. The following statements are true regarding this condition

- A. The year-old age of onset of pancreatitis is pretty typical.
- B. Large pancreatic ductal calcifications in the head are common.
- C. Insulin dependent, ketosis resistant diabetes occurs at young age.
- D. Traditionally malnutrition and consumption of Cassava was linked to the etiopathogenesis of this disease.
- E. SPINK 1 and PRSS 1 genes are both implicated in etiopathogenesis.

**Answer: E**

Tropical pancreatitis is an idiopathic pancreatitis peculiar to tropical regions of the underdeveloped world. It has been best described from southern India. Young age of onset and a high incidence of pancreatic ductal calcifications, especially in the head (stones as large as 4-5cms) and severe insulin dependent diabetes which is peculiarly ketosis resistant are typical for the disease. This form of diabetes is also called Fibrocalculous pancreatic diabetes (FCPD). Previously environmental factors like the ingestions of tapioca vegetable and malnutrition were implicated but current literature suggests the implication of genetic mutations (SPINK 1 and cathepsin B gene mutations) along with oxidative stress injury. The PRSS 1 mutation involved in hereditary pancreatitis in the western world has been ruled out as an etiologic factor in recent studies.

### References:

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