UNMERSITY BELFAST

## Notingham University Hospitas NHS

## All diarrhea is not gastroenteritis - First presentation of carcinoid in ED Darsa P Wilson; Dr Himanshu Gul Mirani

## CASE PRESENTATION:

54-year-old female with PMH of COPD, HTN, previous appendectomy and cholecystectomy, presented to the ED with loose bowel motion for over 10 days with worsening abdominal pain. In the previous 24 hours she recollected having opened her bowels around 30 times. There was no fever, blood in stools, travel, or sick contact. On examination she was apyrexial and abdomen was globally tender but not peritonitic.

## MANAGEMENT AND OUTCOME:

Several differentials like gastroenteritis, colitis \& diverticulitis were considered. CECT abdomen/ pelvis in the ED revealed infiltrating small bowel carcinoid with desmoplastic mesenteric involvement.

Patient was admitted under the surgical team. After further evaluation with gut hormones \& octreotide scan, an ileal neuroendocrine carcinoma was resected.

Image showing infiltrating small bowel carcinoid with tethering of bowel and mesentery (spokewheel sign) suggestive of desmoplastic reaction


## KEY LEARNING POINTS:

"Carcinoid syndrome" is the term applied to a constellation of symptoms mediated by various humoral factors elaborated by some welldifferentiated neuroendocrine tumors (NETs) of the digestive tract and lungs, which synthesize, store, and release a variety of polypeptides, biogenic amines, and prostaglandins.

Tumour production of serotonin is the most likely cause of the diarrhoea in carcinoid syndrome. Serotonin stimulates intestinal secretion and motility and inhibits intestinal absorption. Stools are typically watery and non-bloody and can be explosive and accompanied by abdominal cramping.

Other causes of diarrhoea associated with NET that must be considered due to are pancreatic enzyme insufficiency (PEI), bile acid malabsorption and small intestinal bacterial overgrowth. These are unrelated to serotonin secretion and thus won't respond to the treatment with somatostatin analogues.

## REFERENCES:



