



Uncommon Causes of Pain Abdomen in Middle-Aged Females: A Case Series

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ABSTRACT

In middle-aged females, abdominal pain or discomfort with dyspepsia is a very common complaint. The cause of abdominal pain can vary from hepatobiliary, genitourinary, intestinal, or even functional. Clinical history and examination findings help the clinician with potential diagnostic clues and further management. But even after comprehensive workup, sometimes diagnosis remains uncertain though the proportion of such patients in the above subset of patients is very few. Here in our case series, we diagnosed and treated such patients who had rare causes of pain abdomen- which included neuroendocrine tumors- gastric and duodenal, and mucinous cystic neoplasm of the pancreas.

Key Words: Middle-aged females, Abdominal pain, Dyspepsia, Rare causes, Neuroendocrine tumors.

INTRODUCTION

Abdominal pain is one of the most common reasons for medical consultation and represents a challenge for general practitioners in the outpatient care setting. History taking, symptom evaluation, and physical examination are the crucial steps toward establishing an initial working diagnosis. The subsequent abdominal ultrasound and laboratory analyses are essential tools for the differential diagnosis [1].

Case Series:

Case 1

42yearold lady complained of epigastric pain and dyspepsia for the last month. Epigastric pain and dyspepsia were insidious in onset, episodic, and gradually progressive in nature. There was no history of any warning signs. General examination findings were normal. On systemic examination, there is mild epigastric tenderness present. Her blood examination results were non-contributory. An upper GI endoscopy was done which showed multiple small nodules with edematous mucosa in the body of the stomach. The rapidurease test was negative. Histopathological examination of the small nodules for suggestive of gastric neuroendocrine tumor grade one. Blood investigation for serum gastrin was raised to 468pmol/L [1.6-7.6pmol/L] and anti-parietal cell antibody was positive. Hence, she was diagnosed with Gastrinoma.

Case 2

43yearold lady, complained of intermittent abdominal discomfort for the last 8 months with left-sided abdominal pain loose stools vomiting. She had occasional sweating with palpitations. On examination, she did not have any significant findings. Her initial blood investigations were non-contributory. USG of the abdomen showed a D1 segment duodenal mass of 1 cm diameter. Whole body PETCT showed Ga68 DOTATOC uptake in a nodular lesion in the D1 part of the duodenum, showing enhancement in the arterial phase, abutting the head of the pancreas- suggestive of a primary duodenal neuroendocrine tumor without any metastasis. She underwent laparoscopic excision of the tumor. The biopsy specimen showed a well-differentiated duodenal neuroendocrine tumor, grade 1 invading the submucosa.

Case 3

25year old lady presented with pain in the upper abdomen, moderate intensity, and more during sitting position over the last 5 months. She did not have any history of vomiting, GI bleeding, jaundice, or weight loss. USG whole abdomen detected a large well defined multiloculated cystic SOL in the distal body and tail of the pancreas; CECT abdomen showed a large cyst of 13cm diameter in the distal body and tail of the pancreas having multiple internal septations. Fluid aspiration was done by Endoscopic USG and it was negative for CEA, scolex of hydatid cyst, and malignant cells. She underwent distal pancreatectomy and splenectomy. The biopsy specimen was suggestive of mucinous cystic neoplasm of the pancreas.

Case 4

44year old lady presented with upper abdominal pain with chronic dyspepsia for more than 8 months with loss of 9 kgs weight. There was no associated vomiting, yellowish discoloration of eyes and urine, haematemesis, or melena. USG whole abdomen was normal, with borderline raised Serum Amylase and Serum Lipase. CECT whole abdomen detected multiple peripancreatic lymph nodes with dilated intrapancreatic ducts. Endoscopic USG corroborated with the finding of CECT abdomen. Histopathological samples from endoscopic USG detected acid-fast bacilli with positive TB Gene Xpert. She was started on therapeutic Anti-tubercular drugs after the diagnosis of pancreatic Tuberculosis was confirmed. On further detailed examination, she did not have any other focus of Tuberculosis in the body, and no previous Tuberculosis infection or risk factor. After 6 months of follow-up, her symptoms completely resolved.

DISCUSSION

Abdominal pain is one of the most important and discussed topics in the branch of medicine. The causes of this entity have been more elaborately investigated with the advent of modern technology. Still, the age-old differential diagnosis of inflammatory conditions like acute appendicitis, acute pancreatitis; obstructive lesions and colic; perforation; torsion; and hemorrhage are still the main causes [2].

In our case series, we looked beyond the common causes of abdominal pain and found some rare and unusual etiologies and hence we decided to present this article.

Gastrinoma is a neuroendocrine tumor of the stomach, characterized by excessive gastric acid release. It is commoner in men, with a worldwide incidence of only 0.5 to 3 cases per million per year. Histologically, it is a well-differentiated neuroendocrine tumor, as was found in our case. Medical management includes high-dose proton pump inhibitors. Prognosis is usually less than 50% in 5 years, but it improves drastically with complete tumor removal [3]. Gastrinoma in the Indian population is quite rare, with only one previous report where one member in one family with MEN1 syndrome had features of gastrinoma [4].

A duodenal neuroendocrine tumor is another rare tumor and accounts for only 2-3% of gastrointestinal neuroendocrine tumors. Pathology of the illness is not well understood. Ga68 DOTATEC scan is specific for NETs, but a definitive diagnosis can be done only after a biopsy. NETs usually have slow growth, good differentiation, and good prognosis, as was found in our case [5]. Still, patients with such non-specific abdominal symptoms should be investigated with imaging and gastroscopy to improve overall outcomes as they have malignant potential long-term.

Mucinous cystic neoplasm of the pancreas is a rare cystic incidental finding in the body and tail of the pancreas, usually in middle-aged females as in our patients. Although benign, it has the potential to be malignant to invasive adenocarcinoma. The true incidence and prevalence of this illness are unknown. Mostly asymptomatic, upper abdominal pain is the most common symptom. Pathophysiology is also not clear, with hormonal stimulation being the commonest presumptive mechanism. CA19-9 is the marker for predicting invasive disease. Surgical resection is the standard of treatment [6]. In an Indian study, among all cystic pancreatic neoplasms, around 30% were mucinous with young female preponderance. Although the cause and pathophysiology are still at large [7].

Primary Pancreatic Tuberculosis is a rare condition even in endemic countries. It usually affects young adults. The pathology of this condition is poorly understood. Feng Xia et al. have suggested characteristics of PT as follows: i) mostly occurs in young people, especially females; ii) have a history of TB or come from an endemic zone of active tuberculosis; iii) often present with epigastric pain, fever, and weight loss; iv) ultrasound and CT scan show pancreatic mass and peripancreatic nodules, some with focal calcification [8]. Symptoms are usually non-specific abdominal symptoms. Diagnosis by processing tissue samples is the gold standard. Once the diagnosis is confirmed, anti-tubercular treatment for 6 months is the standard DOTS treatment. It is essential to diagnose the condition to avoid any unnecessary surgery on the patient [9]. In a meta-analysis of the Indian population over 10 years, only 1 patient of primary pancreatic TB was identified [10].

Patient Consent: Taken.

Conflict of Interest: None.

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