

Various Presentations of Neuroendocrine Tumors (NETs): A Study of 10 Cases

B. Santhi¹, G. Balaji Arun²

¹Director and Professor IGS, Madras Medical College

²Junior Resident, Madras Medical College

Abstract:

Neuroendocrine tumors (NETs) are rare and diverse neoplasms that can present with a wide range of symptoms, making diagnosis challenging. This study aims to describe the various presentations of NETs in a cohort of 10 patients, highlighting the importance of considering NETs in patients with nonspecific symptoms.

Introduction:

Neuroendocrine tumors (NETs), formerly known as carcinoid tumors, primarily originate from Kulchitsky cells located at the base of intestinal crypts in the gastrointestinal tract. They are most frequently found in the appendix, ileum, and rectum. Although the primary tumors are typically small, they can lead to significant lymph node metastasis and may appear as multiple lesions in up to one-third of small bowel cases. One notable characteristic of NETs is their ability to induce dense fibrosis in surrounding tissues, which can cause distortion and scarring of the bowel and mesentery, resulting in a distinctive radiological appearance.

NETs are rare tumors that also originate various organs, including the pancreas, lung, and gastrointestinal tract. Due to their rarity and diverse presentations, NETs can be challenging to diagnose. Early recognition and diagnosis are crucial for optimal management and patient outcomes.

Methods:

This is a retrospective study of 10 patients diagnosed with NETs at our institution. We reviewed their medical records and analyzed their demographic data, presentation, diagnosis, treatment, and outcomes.

Results:

Our study population consisted of 10 patients with a mean age of 43.8 years. Six patients were male, and four were female. The most common presentation was gastrointestinal symptoms (40%), followed by incidental findings (20%), hormonal symptoms (20%), and acute presentations (10%), other (10%)

Table 1: sex distribution of Neuroendocrine Tumors (NETs)

Sex	Male	Female
No	6(60%)	4(40%)

percentage of presentation



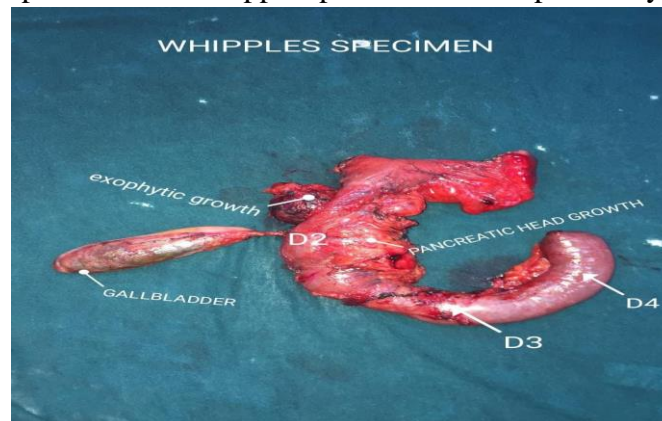
- GASTRO INTESTINAL SYMPTOM
- INCIDENTAL
- HORMONAL PRESENTATION
- ACUTE PRESENTATION
- other

Presentation	Frequency	Percentage
Gastrointestinal symptoms		40%
Incidental findings		20%
Hormonal symptoms		20%
Acute presentations		10%
Other		10%

Discussion:

Our study highlights the diverse presentations of NETs, which can make diagnosis challenging. Gastrointestinal symptoms were the most common presentation in our cohort, followed by incidental findings, hormonal symptoms, and acute presentations. These findings emphasize the importance of considering NETs in patients presenting with nonspecific symptoms. some of the example

Case 1: A 45-year-old male presented with anemia and on health check up he was incidentally found to have a pancreatic head tumor, Tumor marker were within normal limit, CT guided biopsy shows neuroendocrine tumor. We proceed with whipples procedure. Postoperatively patient were uneventful



Case 2: A 50-year-old female presented with a right iliac fossa mass in emergency, On CECT abdomen shows illdefined growth in cecum and ascending colon with adjacent fat stranding and multiple nodal and liver metastasis, CT guided biopsy shows advanced NET. Patient got palliative chemotherapy

Case 3: A 30-year-old male presented with small bowel obstruction, On ct abdomen shows ileoileal intussuseption, we proceed with emergency laparotomy found that ileoileal intussucseption which was reduced and found 1*1cm growth in the ileum which act as lead point for intussusception. Segmental resection with ileoileal anastomosis done. Post operatively patient was uneventful. HPE report shows NET

Case 4: A 28-year-old female presented with right iliac fossa pain and diagnosed as acute appendicitis, emergency open appendectomy was done, post operatively 5*5mm growth in tip of appendix which was found to be NET.

Case 5: A 62 year old female presented with swelling in right side of neck for 2 years, on evaluation CECT NECK shows glomus vagale, a paraganglioma arises from vagal nerve Surgical resection done



Conclusion:

NETs are rare and diverse neoplasms that require a high index of suspicion for diagnosis. Our emphasizes the importance of considering NETs in patients presenting with nonspecific symptoms. Early recognition and diagnosis are crucial for optimal management and patient outcomes. Further research is needed to improve our understanding of NETs and their presentations.