



CASE SERIES ON SMALL BOWEL NEUROENDOCRINE TUMOR PRESENTING AS CHRONIC ANAEMIA

Radiodiagnosis

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ABSTRACT

Neuroendocrine tumors (NETs) of GIT originally called as APUDomas comprises of wide spectrum of malignancies and is derived from embryonic Neural crest cells of gastrointestinal tract. We present a cases series of NETs that presented as chronic anaemia

KEYWORDS

Neuroendocrine tumors, NET, Chronic anaemia,carcinoid

INTRODUCTION:

Neuroendocrine tumors (NETs) of Gastrointestinal tract is uncommon (approx.. 1% of all GIT malignancies) than adenocarcinomas. They are derived from the neuroendocrine cells of GIT, liver, lung, urethra and skin. Majority of these tumors occur in Gastroenteropancreatic axis (GEP axis). They secrete bioactive substances and neuroendocrine markers. They are classified as functional and non-functional NETs. Non functional NETs presents as large mass with or without metastasis at the time of diagnosis. Functional NETs presents as constipation, diarrhea, vague abdominal pain. Bleeding from duodenal NETs is relatively common. In this article, We present a case series of Duodenal neuroendocrine tumors that presented with chronic anaemia

CASE SERIES:

Case 1:

64 Years old male patient who presented with multiple episodes of passing malena, episodes of fainting, palpitation and anxiety with Haemoglobin 6.4mg/dl was referred from Department of internal medicine to the Department of Radiodiagnosis for further evaluation. CECT Abdomen with CT enterography is done with PHILIPS 16 SLICE CT scan machine.

IMAGING FINDINGS:

On imaging, There was a well defined polypoidal frond like homogeneously enhancing mass lesion of size approx.. 4x3cms is noted in the first and second part of duodenum. The paraduodenal fat planes were very well maintained with evidence of few locoregional lymph nodes noted. The features were suggestive of malignant intraduodenal mass lesion. We advised for Upper GI endoscopy and biopsy for further evaluation of the lesion. Rest of the solid viscera and abdomen were within normal limits.



UGI ENDOSCOPY REPORT:

There was a large eccentric submucosal heteroechoic lesion arising from the anterolateral wall of the duodenal bulb and 1st duodenum causing bulge over the pylorus. There is a small surface ulcer with nipple, indicative of recent bleed. Few small satellite lesions are noted in duodenal bulb, likely GIST/leiomyoma.

INTRA OPERATIVE NOTES AND PROCEDURE DETAILS:

The anaemia was corrected with blood transfusion preoperatively and

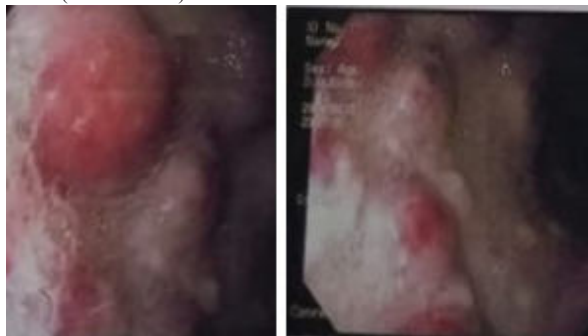
The patient was advised by the Surgical team for the duodenectomy procedure and anastomosis. The patient improved rapidly after the procedure with normal haemoglobin levels after blood transfusion.



HISTOPATHOLOGY REPORT:

Small aggregates of tumor cells were noted with monotonous hyperchromatic nucleus and eosinophilic cytoplasm and the tumor cells were showing diffuse synaptophysin and chromogranin positivity.

The features were suggesting well differentiated Neuroendocrine tumor (NET Grade 1).

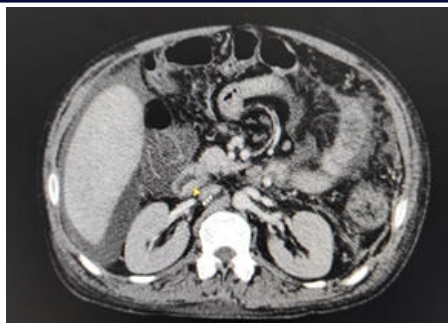


CASE 2:

45 Years old male patient who presented with loss of appetite and weakness since 6 months with H/O chronic unexplained anaemia was referred from Department of internal medicine to the Department of Radiodiagnosis for evaluation. CECT Abdomen with CT enterography is done with PHILIPS 16 SLICE CT scan machine.

IMAGING FINDINGS:

On imaging, there were multifocal nodular homogeneously enhancing lesions in duodenal walls (D1-D4) and pylorus of stomach that were protruding into the lumen. Few subcentimetric lymph nodes in periportal, para aortic region were demonstrated. Mild to moderate ascites was there. The features were suggestive of neoplastic etiology. We advised for Upper GI endoscopy and biopsy for further evaluation of the lesion. Rest of the solid viscera and abdomen were within normal limits.



UGI Endoscopy findings:

Multiple sessile polypoidal lesion with central umbilication noted at D1 and D2 segment of duodenum with central umbilication suggesting it to be Duodenal neuroendocrinal tumor. Multiple biopsies were taken which confirmed the diagnosis of neuroendocrine tumor on histopathology.



Metabolic work up was done which suggested raise in chromogranin A levels upto 118.20 ng/ml . Gastrin and 5HIAA levels were normal

Treatment and follow up:

The patient was advised Inj. Octride LAR (30 mg) once a month for 2 months.

Patient was reviewed after a month of treatment with repeat Chromogranin A levels which was reduced to 23.49 ng/ml . The patient's Haemoglobin levels improved to normal limits and the overall appetite and general health of the patient was restored.

CONCLUSION

Though neuroendocrine are uncommon tumors of GIT, they should be considered as differentials in the setting of chronic unexplained anaemia since Bleeding in a neuroendocrine tumor is common and should be kept in mind for both practicing radiologists and Physicians especially in the setting of unexplained chronic anaemia.

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