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SMALL BOWEL NEUROENDOCRINE TUMOR CAUSING OBSTRUCTION - A RARE CASE REPORT

General Surgery

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ABSTRACT

small bowel neuroendocrine tumor is a rare malignency presented with acute intestinal obstruction delay in diagnosis may lead to futile complication.we report a classic rare case of SBNET in terms of patient profile , presentation, investigation and management

KEYWORDS

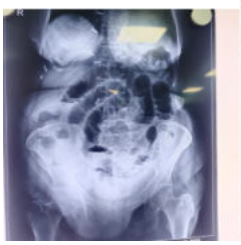
INTRODUCTION:

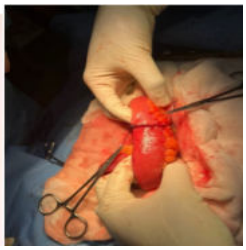
Neuroendocrine tumor (NETs) previously known as carcinoid tumors. It remains as a relatively rare malignancy with the incidence of small bowel neuroendocrine tumor reported to be 2.5 to 5% per 1million population. Most commonly NET seen in appendix followed by small bowel, caecum. Mainly they are arising from Kuchinsky cells at the base of intestinal crypts. Primarily they are small but may causes significant nodal metastasis. Upto one third of the cases may have multiple tumors.NETs can produce numerous of Vasoactive peptides like seratonin,histamine, kallikrein and prostaglandin common clinical syndrome itself consists of Palpitation, Diarrhoea,Bronchospasm,Tricuspid stenosis/regurgitation,facial flushing.

CASE PRESENTATION:

73-year-old female presented to emergency department with the complaint of abdominal pain for 2 days with abdominal distension for past 2 days with not passed stool and flatus for past 2 days. Examination revealed sick looking dehydrated. Patient was tachypneic and tachycardia present on examination. Per abdomen: abdomen was distended with flank fullness +. No guarding and rigidity were there during examination. on auscultation bowel sounds were absent.

On Ryles tube insertion about 500ml of feculent content were drained. Plain x ray abdomen has been taken showing multiple air fluid level with dilated small bowel was seen hence CECT has been taken showing multiple dilated small bowel with loops with multiple air fluid level noted from jejunum to middle one third of ileum and maximum diameter of 3.8cm and transtion point in mid ileum no evidence of free fluid in the abdomen Due to acute small bowel obstruction patient was taken for emergency laparotomy.





INTRA-OPERATIVE FINDING:

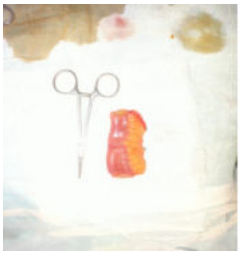
1. Intra operatively found dilated jejunum and proximal ileum present with ileo-ileal intussusception noted at mid ileal segment followed by collapsed distal segment
2. Intussusception was about 25cm from ileo-cecal junction
3. Manual reduction of intussusceptions segment was made bowel found to unhealthy and induration was present at anti-mesenteric border with small hard nodule of size 1*1cm found intra luminally. Proceeded with limited resection and ileo-ileal anasthamosis done.
4. On cut section of lumen 1*1 cm lesion noted in anti-mesenteric border specimen was sent for histopathological examination.

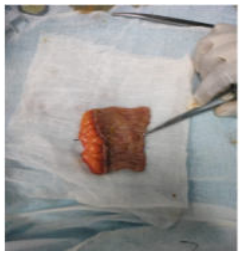
Post op period was uneventful

HISTOPATHALOGICAL REPORT:

Microscopic description:

Focal erosion with the underlying neoplasm arranged in nests, islands of monomorphic cells having moderate eosinophilic cytoplasm, round to oval nuclei with stippled chromatin. Tumor infiltrate underlying muscularis propria and serosa Imp: well differentiated grade 1 neuro endocrine tumor





Post operatively: Gallium 68 DOTATATE PET scan taken showing No residual lesion and hence advised annual follow up

DISCUSSION:

Small bowel neuro endocrine tumor most commonly observed type of small bowel tumor. More frequently NETs are discovered after resection of the small bowel who undergo emergency surgical intervention for obstructive symptoms. presenting with anemia or overt gastro intestinal bleed,or as primary lesion in patient with carcinoid syndrome and metastatic disease who undergo surgical exploration.

They are also occasionally found in a patient For non-metastatic SBNET curative resection is surgical goal. Wireless capsule endoscopy used to visualize the small bowel and to identify multiple SBNET

CONCLUSION:

The optimal surgical treatment of small bowel neuroendocrine tumor is segmental resection and anasthamosis.The abdomen were diligently inspected to look for any peritoneal and solid organ metastasis somatostatin analogue are the first line of treatment of functional and non-functional metastatic SBNETs both for anti-proliferative effect and for control of carcinoid symptoms.patient often need long or short acting somatostain analogue injection are used as a rescue theraphy

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