

Blackish Small Intestinal Mucosa - New Thief into The House

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1. Introduction

A 36-year-old Asian male with no comorbidities and significant past history presented to us with complains of peri umbilical colicky pain on and off, and constipation for 2 years. He also reported weight loss of 15 kgs in a year. On evaluation of CT enterography there was mid and distal ileal loops wall thickening with enhancement and tethering of bowel loops with adjacent vascularity. With these finding we planned spiral enteroscopy with antegrade approach but the scope could pass up to 350 cm, due technical difficulty. So, we planned retrograde approach and scope could have passed up to 200cm which showed us edematous blackish pigmented mucosa and friability with partial narrowing (Figure 1). We biopsied the edematous blackish pigmented mucosa and histopathological sample showed nests of monomorphic round cells

in lamina propria and muscularis mucosae. Individual cells have round to oval hyperchromatic nuclei dispersed chromatin, scanty eosinophilic cytoplasm, minimal anisonucleosis with Ki index of 67 1% (Figure 2A&B) and positive chromogranin synaptophysin (Figure 3A&3B) suggestive well differentiated Grade 1 Neuroendocrine tumor.

Ga-68 DOTA-TATE PET CT scan was done to rule out the metastasis which showed metabolically active multiple tiny focal arterial enhancing wall thickening in mid and distal ileal loops with adjacent vascularity predominantly with tracer avid enhancing mesenteric lymph node noted with adjacent tethering of mesentery. All findings were suggestive of neuroendocrine tumor. Patient operated with R0 resection. Resected segment showed two tumor of size 2.8*1.5cm and 1.5 *1.2 cm, histologically well differentiated NET grade-1 with extension up to muscularis propria [1,2].

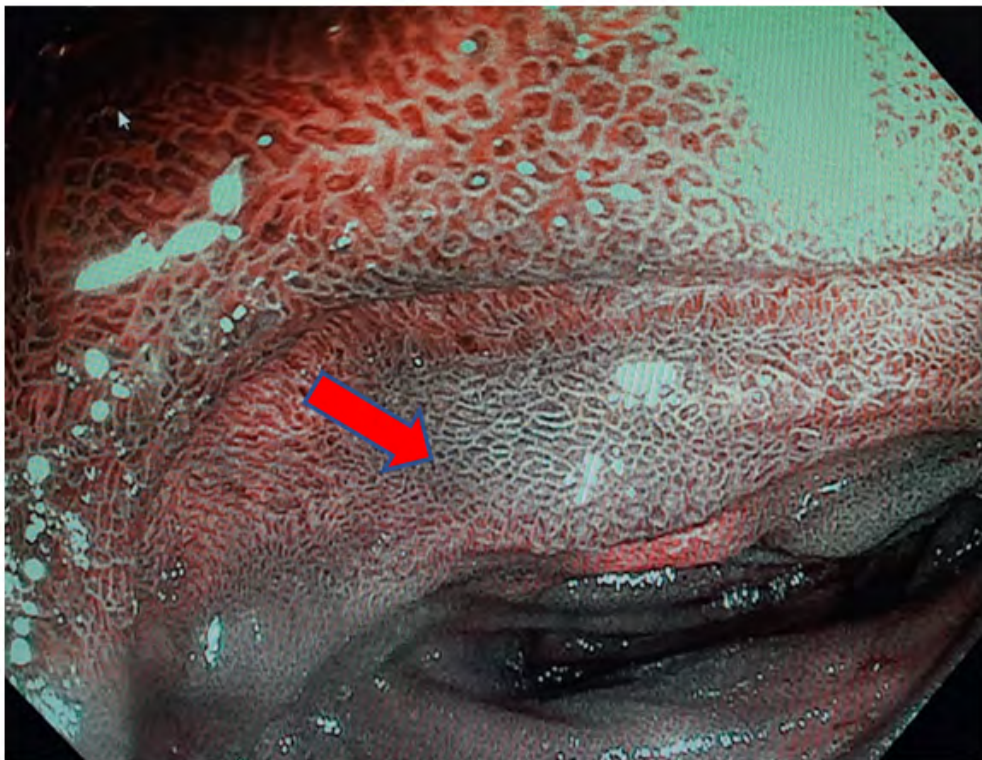


Figure 1:

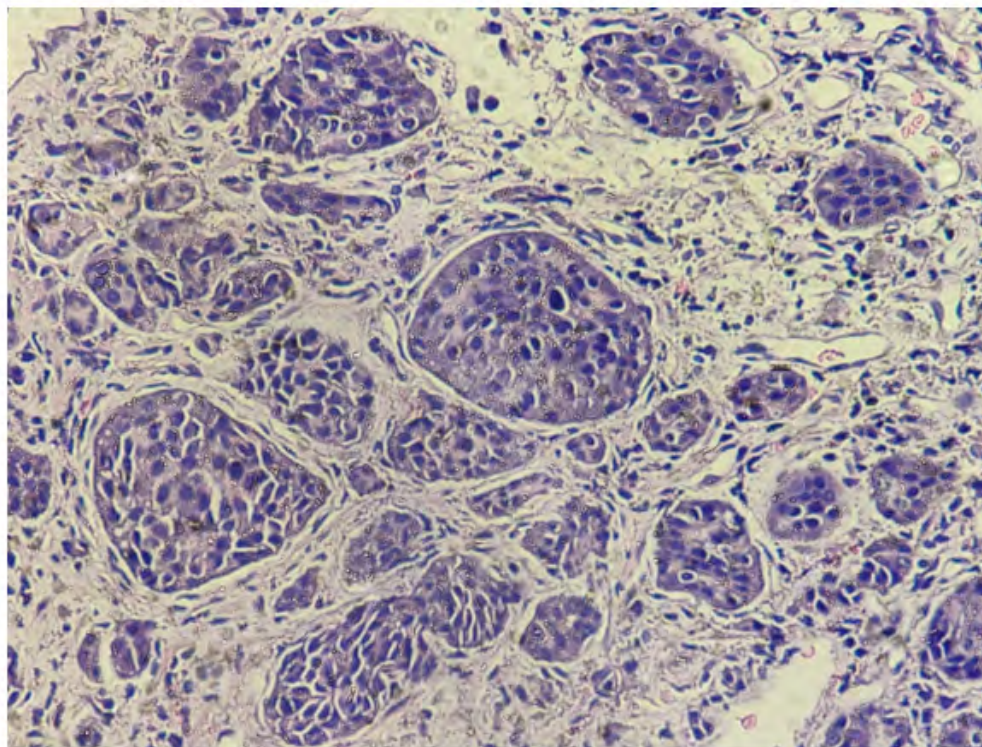


Figure 2A: IHC- positive for PanCK, chromogranin, synatophysin

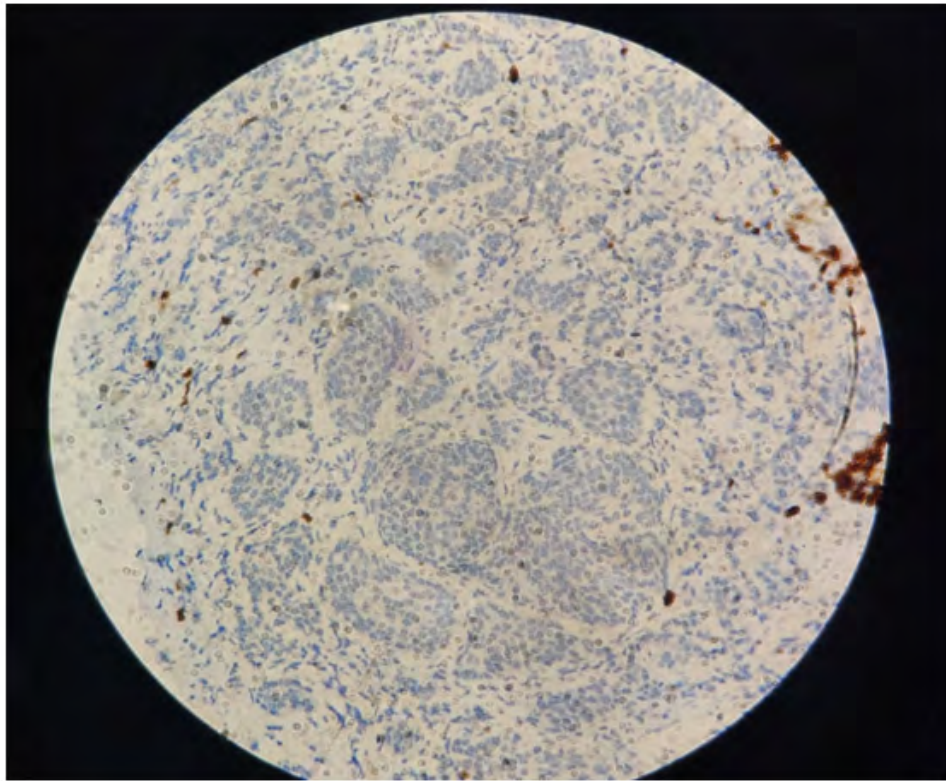


Figure 2B: Ki 67 -1 %

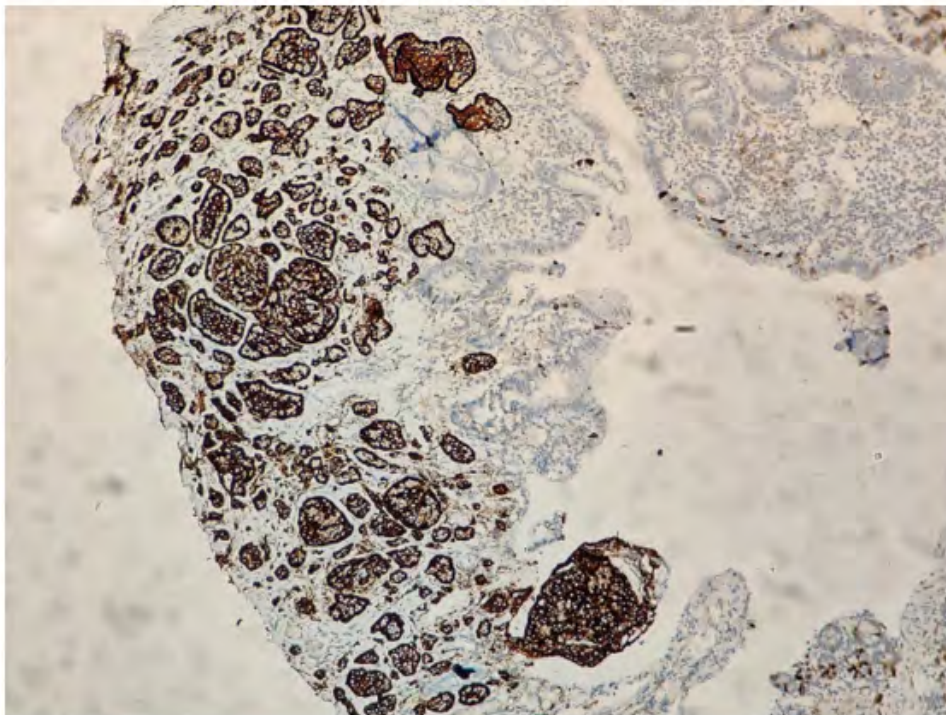


Figure 3A: Synaptophysin

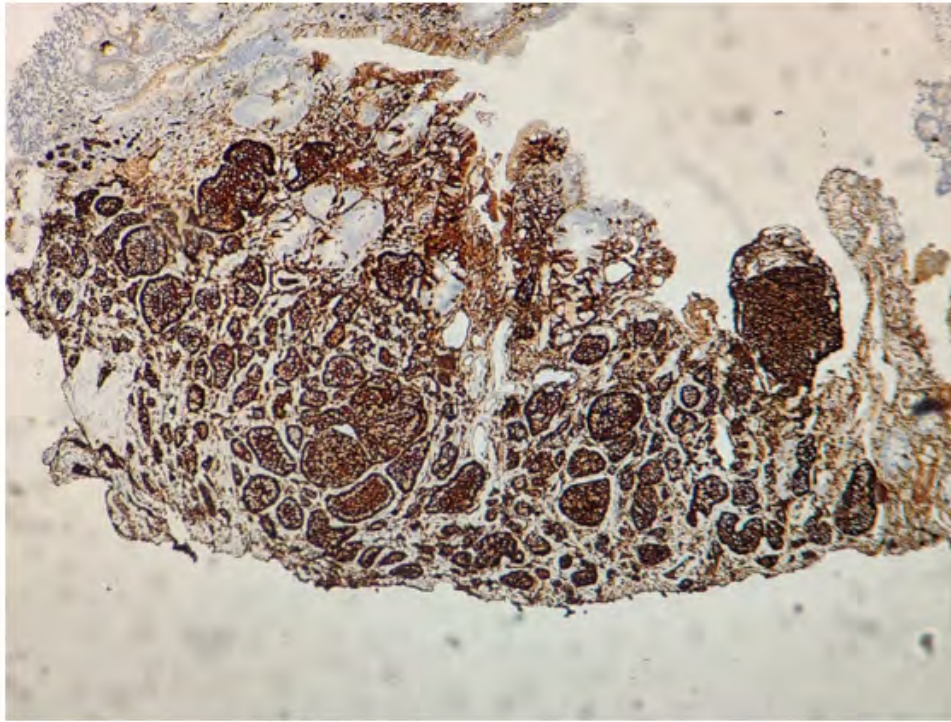


Figure 3B: Chromogranin

2. Discussion and Conclusion

Incidence of Neuroendocrine tumor is increasing worldwide even the localized form of NET1. The prevalence is higher in rectum followed by lung and then in small intestine. Small intestinal neuroendocrine tumour is the most common small bowel malignancy. More than two-third of them occur in the terminal ileum within 60 cm of ileocecal valve as in our case. Carcinoid syndrome generally occurs when jejuno-ileal neuroendocrine tumours metastasize to the liver. In our case report it has shown that the pigmented edematous mucosa could be a part of neuroendocrine tumor and proper evaluation of small bowel specially with new advances such as spiral enteroscopy could be helpful.

References

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