

A Rare Case of Neuroendocrine Tumors Appearing in the Ascending and Transverse Colon

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Introduction

- Neuroendocrine tumors in the colon most frequently appear in the rectum¹
- Presence of neuroendocrine tumors in other colonic segments suggests a need to reevaluate treatment related guidelines
- Appearance of neuroendocrine tumors of the colon are relatively rare, but can be confirmed from biopsies

Case Report

Pleasant 77-year-old male with a PMH of COPD, CAD, HLD, recent diagnoses of LLL lung mass with hilar LAD, and significant metastatic disease in the liver, adrenal gland, and omentum, presented to the hospital for worsening fatigue. Patient's first colonoscopy was at age 50, with subsequent colonoscopies at five-year intervals. No adverse findings were found in previous evaluations. Denied changes in bowel habits and polyps. Upon request of oncology team, colonoscopy and IR-guided liver biopsy were performed.

Findings

- Cecal, ascending, and transverse colon polyps:
 - "Volcano-shaped" masses with central ulceration. Hard texture
 - Colonic biopsies were histologically identical to those from IR-guided liver biopsy (metastatic)
 - KI67 index: >90-95%
 - Positive stain:
 - Pancytokeratin AE1/AE3
 - CD56
 - Synaptophysin
 - Chromogranin
 - SATB2
 - TTF-1
 - Negative stain:
 - CDX2
- Rectal Polyp:
 - Fragments of tubular adenoma
 - No dysplasia/malignancy identified



Cecum



Ascending Colon



Hepatic Flexure



Transverse Colon

Discussion

- This case describes the appearance of neuroendocrine tumors in uncommon locations
- Absence of metastatic rectal polyps. Benign polyp identified
- Atypical morphological presentation of the neuroendocrine tumor in the proximal colon²
- Similar staining patterns as common rectal neuroendocrine tumors²
- Possibility for CRC in atypical colon locations should be considered if there is history of metastatic neoplasia in the liver

Conclusion

- Neuroendocrine tumors are a rare finding in the colon, especially outside of the distal portion
- This case illustrates an unusual case of neuroendocrine tumor of the colon, with multiple foci of disease
- Appearance of 'Volcano-shaped' lesions should prompt an endoscopist to consider neuroendocrine tumor

References

- Modlin IM, Sandor A. An analysis of 8305 cases of carcinoid tumors. Cancer. 1997;79(4):813-829. doi:10.1002/(sici)1097-0142(19970215)79:4<813::aid-cncr19>3.0.co;2-2
- Nagtegaal ID, Odze RD, Klimstra D, et al. The 2019 WHO classification of tumours of the digestive system. *Histopathology*. 2020;76(2):182-188. doi:10.1111/his.13975