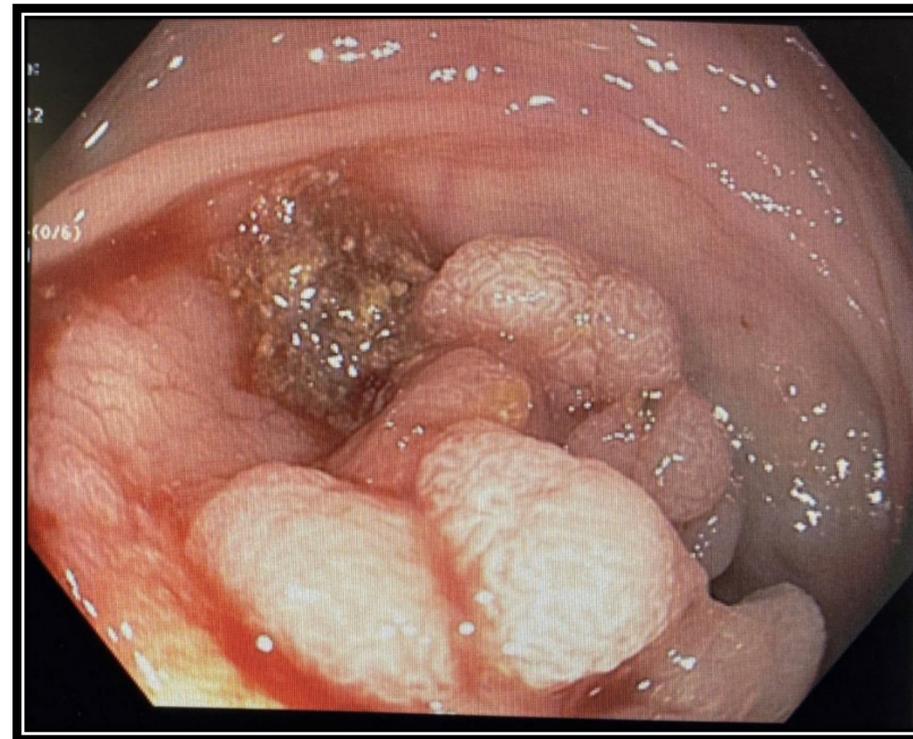


## Introduction

Synchronous colorectal cancer (CRC) is described as the presence of more than one primary cancerous lesion at initial presentation or within 6 months of diagnosis. It is a rare and distinct type of CRC compared to a solitary lesion. The prevalence rates range from 1.1 to 8.1%. Synchronous CRC is more often observed in males with a male to female ratio of 1.8. We report a case of an elderly female patient with quadruple synchronous CRC presenting as severe anemia.

## Case Description

An 81-year-old female with no significant past medical or family history presented for generalized weakness. The physical examination was normal. Labs showed hemoglobin of 4.9 and CEA value of 90.6 ng/ml. Anemia workup revealed Iron deficiency. The patient received 3 units of packed red blood cells and started on iron replacement. Colonoscopy findings revealed one 30mm polyp at rectosigmoid colon and few 5-20mm polyps in sigmoid, descending, and ascending colon with 4 partially obstructing mass lesions in proximal descending colon, hepatic flexure, cecum and ileocecal valve. Pathology diagnosed all the lesions as invasive adenocarcinoma with signet cell and mucin presence associated with tubulo-villous adenoma. Computed tomography of chest, abdomen and pelvis did not reveal any evidence of metastatic disease. Surgery and Oncology consulted got for further management.



**Figure 1.** Partially obstructing mass in proximal descending colon.

## Discussion

Inflammatory bowel disease, familial adenomatous polyposis and hereditary non polyposis colorectal cancer has been shown to be significant predisposing risk factors for synchronous CRC. However, they contribute to only 10% of all cases of synchronous CRC, which indicates that most of the risk factors are still unknown for synchronous CRC. Studies reported that most synchronous lesions occur in different regions of colon and only a few develop at the same segment, therefore it is important to have a thorough pre-operative examination of the colon.

## Conclusions

Despite the growing incidence of synchronous CRC, little is known about the risk factors, molecular characteristics, and prognosis. We aim to add to the growing literature for detailed review of the profiles of such patients to aid in identification of at-risk patients to design more effective and targeted therapies to improve outcomes.

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<sup>4</sup> Greenstein, A. J., Slater, G., Heimann, T. M., Sachar, D. B., & Aufses, A. H., Jr (1986). A comparison of multiple synchronous colorectal cancer in ulcerative colitis, familial polyposis coli, and de novo cancer. *Annals of surgery*, 203(2), 123–128. <https://doi.org/10.1097/0000658-198602000-00002>