

## Case Reports

**An asymptomatic tubular villous adenoma in a young male**

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**Abstract**

Polyps of the colon are a common occurrence, and whose incidence increases with age. Polyps have the ability to transform into neoplasms, and the polyp's likelihood of becoming cancerous is closely related to its size. The larger a polyp grows, the more likely it is to become cancerous. Once a polyp reaches 2 cm, the risk of malignant transformation is in excess of 20%. There are several subtypes of polyps: tubular, villous, or tubulovillous. Villous adenomas are the most likely to transform, whereas tubular adenomas carry the least risk. Symptoms range from anemia and constipation, to abdominal pain and obstruction, depending on the size and location of the lesion. As a general rule, the larger the size of the polyp, the likelihood for pain and obstruction increases. Herein we present a case of a young patient presenting with mild anemia who was found to have a giant tubulovillous adenoma.

**Key words:** Asymptomatic tubulovillous adenoma; Malignancy; Giant adenoma

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**INTRODUCTION**

Because of their potential for malignancy, colorectal polypoid lesions should be biopsied, destroyed or completely removed. Further management is based on their histological characteristics. Adenomatous polyps are the most common type, and are further divided into tubular, tubulovillous and villous. Of the three, the villous subtype has the greatest potential for malignant transformation.

Colonic polyps are usually asymptomatic. If large, they may cause changes in bowel habits, abdominal pain, or gastrointestinal bleeding (occult or non-occult). In this report, we present the case of

a young male with a giant tubulovillous adenoma located in the ascending colon.

**CASE PRESENTATION**

A 31-year-old male who was noted to be mildly anemic (hemoglobin 10.7) with a positive fecal occult blood test. Past medical history was relevant for morbid obesity, GERD, an open appendectomy as a child, and laparoscopic gastric banding in 2005. Medications included a proton pump inhibitor and an anxiolytic. Family history was negative for colorectal lesions or malignancies.

Workup of the anemia encompassed an upper endoscopy that revealed mild gastritis and a colonoscopy that demonstrated a large ascending colon polyp. The polyp was biopsied and marked with India ink. Given the large size of the lesion, an endoscopic

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**Figure 1** Ex-vivo specimen of the giant tubulovillous adenoma , with proximal and distal colonic tissue .

polypectomy was not attempted. Biopsy results were consistent with a tubular adenoma. A CT scan of the abdomen and pelvis showed no further lesions.

The patient underwent a laparoscopic right colectomy with no complications. The polyp was found to be  $8 \times 6.5 \times 3.5$  cm in size (Figure 1) and histologically represented a tubulovillous adenoma. No dysplasia or carcinoma was found. All lymph nodes resected ( $n = 34$ ) were benign.

The patient's post-operative course was uneventful.

## DISCUSSION

In the United States, colorectal cancer (CRC) is the third most common cancer diagnosed in men and women and the second leading cause of death from cancer<sup>1</sup>. Current American Cancer Society screening guidelines advocate screening for the average -risk population (asymptomatic, no family history of colorectal carcinoma, no personal history of polyps or colorectal carcinoma, no familial syndrome) beginning at the age of 50. Proper screening in the average-risk population includes guaiac-based fecal occult blood testing (gFOBT), flexible sigmoidoscopy, colonoscopy, double -contrast barium enema, and computed tomographic colonography<sup>1</sup>. However, because of the low incidence of pre-cancerous lesions in

those under the age of 50, screening for polyps is not recommended unless symptoms are present. Previous studies addressing the incidence of colorectal neoplasias in patients under the age of 50 found that in this population the prevalence of colorectal lesions was extremely low<sup>2</sup>. Furthermore, the increased cost and burden to the health care system does not warrant any type of screening in the asymptomatic, under -50 years of age population.

Adenomatous polyps are common in the United States, occurring in up to 25% of the population older than 50 years. By definition, they are dysplastic and have the ability to undergo transformation into cancerous lesions. The risk of malignant degeneration is related to the size and type of polyp. While tubular adenomas are associated with malignancy in only 5% of cases, up to 40% of villous adenomas may harbor cancers. Tubulovillous adenomas have an intermediate risk of 22%. Polyps less than 1 cm in size carry a low malignant potential. The incidence increases with size, with polyps larger than 2 cm carrying a 35% to 50% transformation rate.

Giant adenomatous polyps have been rarely described in the literature. One case report describes uncharacteristic upper abdominal pain secondary to a giant villous adenoma<sup>3</sup>. Another mentions other ab-

dominal symptoms of patients with giant villous adenomas<sup>4</sup>. What is interesting to note is that although our patient had a large growth, he did not exhibit any specific abdominal complaints or electrolyte disturbances.

Endoscopic resection is a useful approach for the removal of giant polyps<sup>5</sup> less than 6 cm in size. In our case, we opted for a formal colon resection due to the large size of the adenoma and the malignant potential. To our surprise, this large polyp did not contain dysplasia or carcinoma (either invasive or *in situ*).

In conclusion, it is important to remember that giant tubulovillous adenomas can reach significant dimensions in the absence of abdominal findings. Furthermore, our case highlights the work-up and management of a patient presenting with mild anemia secondary to a giant tubulovillous adenoma. Unfortunately since these giant adenomatous polyps have been rarely described in the literature, it is difficult to understand how their pathophysiology may differ

from that of routine adenomatous polyps encountered in everyday clinical practice. We hope this will be elucidated in the years to come.

**Conflicting Interest:** None.

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