Mixed Polyposis Coli: Report of a Rare Entity with Review of Literature

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ABSTRACT

Colorectal polyps may be detected incidentally on a screening colonoscopy or when they present with symptoms like anaemia or gastrointestinal bleeding. Early recognition and prompt management of polyps can cure the primary disease and prevent future risk of malignancies in the patient and provide an opportunity to screen the families in cases of inherited polyposis syndromes. We report a case of rectal bleeding due to colorectal polyps of varying histology. Histology showed hyperplastic polyp, juvenile polyps (JP) with focal dysplasia, adenomatous polyp and villous adenoma with dysplasia. He underwent total proctocolectomy with ileal pouch anal anastomosis (J-pouch) (TP-IPAA). Mixed polyposis syndrome is a rare entity. (J Dig Endosc 2013;4(2):39-41)

Key Words: Rectal bleeding - Hereditary mixed polyposis syndrome - Adenomatous polyps - Hyperplastic polyps - Juvenile polyps

CASE REPORT

A 24 year male presented with history of bleeding per rectum for one and half years. It was small in amount, reddish in colour and mixed with stools. He was also symptomatic with generalised weakness and fatigue. There was no history of tenesmus, diarrhoea, constipation, abdominal pain or distension, vomiting or fever. There were no similar complaints or gastrointestinal malignancy in the family. Physical examination revealed anaemia with normal abdominal, per rectal and proctoscopic findings. Colonoscopy revealed multiple polyps in colon and rectum. Two large polyps in the rectum and 60 other polyps spanning the rest of the colon were removed over 4 sessions of polypectomy. The histo-pathological examination was suggestive of polyps of different varieties removed from...
polyps in any of his first degree relatives.

**Discussion**

The diagnosis of polyposis coli is usually made in a symptomatic individual or during screening of an asymptomatic family member. Polyposis syndromes although rare, pose a significant clinical and genetic exercise due to the high risk of colorectal carcinoma. The commonly encountered inherited polyposis syndromes are familial adenomatous polyposis and its variants, Peutz-Jeghers syndrome and juvenile polyposis. They are easily distinguished by the characteristic phenotype and typical histology. But rarely, we see association of adenomatous polyps with JP, Peutz-Jegher's polyps and hyperplastic elements within the same polyp or in a synchronous/metachronous lesion. The risk of colorectal neoplasia in mixed large bowel polyps was described in 1989. But the hereditary nature of this mixed polyposis has been unfolded by Whitelaw et al in a large family (St. Mark's family 96). In
derived, there was no ascites. Small bowel, solid viscera, pelvis, peritoneum and omentum were grossly normal. The resected specimen revealed multiple pedunculated and sessile polyps throughout the colon and predominantly in rectum of various sizes (Figure 5). The patient is asymptomatic after 6 months of follow up. Family screening by flexible sigmoidoscopy did not reveal adenomatous polyp (Figure 1), JP with focal dysplasia (Figure 2) and adenomatous polyp(Figure 3). Follow up colonoscopy revealed recurrence of polyps with an additional sessile lesion in the rectum, biopsy of which revealed villous adenoma with dysplasia(Figure 4). Barium meal follow through (BMFT) examination did not reveal any polyps in the small bowel. Contrast enhanced computerized tomography (CECT) scan of abdomen did not show any evidence of growth suggestive of colorectal malignancy, enlarged lymph node or metastasis. He underwent total proctocolectomy with ileal pouch anal anastomosis (J-pouch). Intraoperatively, there was no ascites. Small bowel, solid viscera, pelvis, peritoneum and omentum were grossly normal. The resected specimen revealed multiple pedunculated and sessile polyps throughout the colon and predominantly in rectum of various sizes(Figure 5). The patient is asymptomatic after 6 months of follow up.

**Figure 1:** Hyperplastic polyp with focal ulcerations (H&E, original X10)

**Figure 2:** Juvenile polyp with smooth muscle fibres in lamina propria (H&E, original X40)

**Figure 3:** Adenomatous polyp with high grade dysplasia  **Figure 4:** Villous adenoma (H&E, original X40)

(H&E, original X10)
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In conclusion, mixed polyposis coli is a distinct entity of colorectal polyposis with high risk of malignancy. Identification of its existence separate from other inherited and sporadic polyposis coli is important due to the increasing recognition in the differences in the management, family screening and surveillance protocols.

References


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