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Prolonged survival after surgery for ileal adenocarcinoma with ovarian metastasis: A case report

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Abstract

Adenocarcinoma of the ileum is a rare malignancy. The prognosis largely depends on the stage at diagnosis, and metastatic disease typically carries a poor outcome. We report a case of prolonged survival following resection of ileal adenocarcinoma with ovarian metastasis. A 22-year-old female presented with mild lower abdominal pain. Ultrasonography revealed a left complex adnexal cyst. During laparotomy, two distinct masses were identified in the distal ileum and the left ovary. Segmental ileal resection with mesentery and left salpingo-oophorectomy were performed. Histopathology confirmed primary ileal adenocarcinoma with ovarian metastasis. One year later, a CT scan showed a mesenteric mass, which was excised; histopathology again revealed adenocarcinoma. The patient remains disease-free six years after the initial surgery. This case highlights the potential for long-term survival following curative resection, even in advanced stages of ileal adenocarcinoma.

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Introduction

Primary adenocarcinoma of the small intestine is rare. Clinical presentation is often nonspecific, commonly includes abdominal pain, weight loss, intestinal obstruction, gastrointestinal bleeding, or symptoms secondary to metastasis.[1] Computed tomography is the preferred imaging modality for detecting ileal masses.[2] Surgical resection remains the mainstay of treatment, and prognosis depends primarily on the stage at diagnosis.[3] We report a case of ileal adenocarcinoma with ovarian metastasis in a young woman who achieved prolonged survival following curative surgery.

Case report

A 22-year-old female presented with mild lower abdominal pain of several weeks' duration. She denied abdominal distension, vomiting, constipation, bleeding per rectum, or weight loss. Her menstrual cycles were regular. Physical examination was unremarkable. Laboratory evaluation revealed haemoglobin of 8.2 g/dL; other hematologic and biochemical parameters were within normal limits. Tumour markers were as follows: CEA 1.36 ng/mL and CA-125 44 U/mL. Abdominal ultrasonography revealed a left complex adnexal cyst.

She was diagnosed with an ovarian neoplasm and underwent laparotomy. Intraoperatively, a 5-cm mass was found in the ileum, approximately 40 cm proximal to the ileocecal junction, with mild proximal dilatation; and a 6-cm mass was identified in the left ovary. There was no ascites or peritoneal deposit, and other abdominal organs appeared normal. Segmental resection of the ileum with 10 cm proximal and distal margins, including mesentery, and left salpingo-oophorectomy was performed. The postoperative course was uneventful.

Histopathological examination revealed a well-differentiated adenocarcinoma of the ileum extending up to the serosa, with four of eleven lymph nodes were positive for metastatic deposits. The ovarian mass was consistent with metastatic adenocarcinoma.

The patient declined adjuvant chemotherapy but continued regular follow-up. Fifteen months later, ultrasonography demonstrated enlarged mesenteric lymph nodes. A subsequent CT scan of the chest, abdomen, and pelvis revealed a 3.5-cm heterogeneously enhancing mesenteric lesion without invasion of adjacent structures, Figure 1. Tumour markers (CEA 1.45, CA-125 24) remained within normal limits. Following exclusion of distant metastasis, she underwent laparotomy. Intraoperatively, enlarged mesenteric lymph nodes were observed near the previous anastomotic site, with a normal right ovary, liver, and small bowel. Segmental resection of ileum with mesentery containing the lymph nodes was performed. Histopathology confirmed metastatic adenocarcinoma within mesenteric nodes, with negative resection margins.

The patient continues to do well, with no clinical or radiological evidence of recurrence five years after the second surgery.

Discussion

Cancers of the gastrointestinal tract are among the most common malignancies worldwide; however, small intestinal cancers are rare, accounting for only 3–5% of gastrointestinal malignancies and 0.6% of all cancers in the United States.[4] Despite the small intestine constituting nearly 90% of total mucosal surface area of the gastrointestinal tract, malignancy is disproportionately uncommon. Several hypotheses have been proposed, including rapid luminal transit time, low bacterial load, and protective role of secretory immunoglobulin A.[5]

Small bowel tumours include adenocarcinoma, neuroendocrine tumours, lymphoma and sarcoma, with adenocarcinoma being the most common subtype. The duodenum is the most frequent site (55–82%), followed by the jejunum (11–25%) and ileum (7–17%).[6] Risk factors include celiac disease, inflammatory bowel disease, and hereditary cancer syndromes.[7] In a series of 491 cases, abdominal pain (43%), nausea and vomiting (16%), and anaemia (15%) were the predominant

symptoms.[8] Due to nonspecific presentations, up to 30% of cases are diagnosed incidentally during laparotomy.[9] In our case, the diagnosis was made during surgery for a suspected ovarian mass. Common metastatic sites include the liver, lungs, bone, and brain; ovarian metastasis is rare.

Surgery is the cornerstone of management for ileal adenocarcinoma. Resection with adequate margins and regional lymphadenectomy remains the standard approach. Our patient underwent curative resection of both ileal and ovarian lesions. Although ovarian metastasis from ileal adenocarcinoma typically portends a poor prognosis, our patient achieved long-term survival with disease-free status five years after resection of recurrent nodal disease. The role of adjuvant chemotherapy in ileal adenocarcinoma remains uncertain.[10] Some retrospective studies have suggested improved disease-free survival with adjuvant therapy, but in this case, curative surgery alone achieved durable remission.

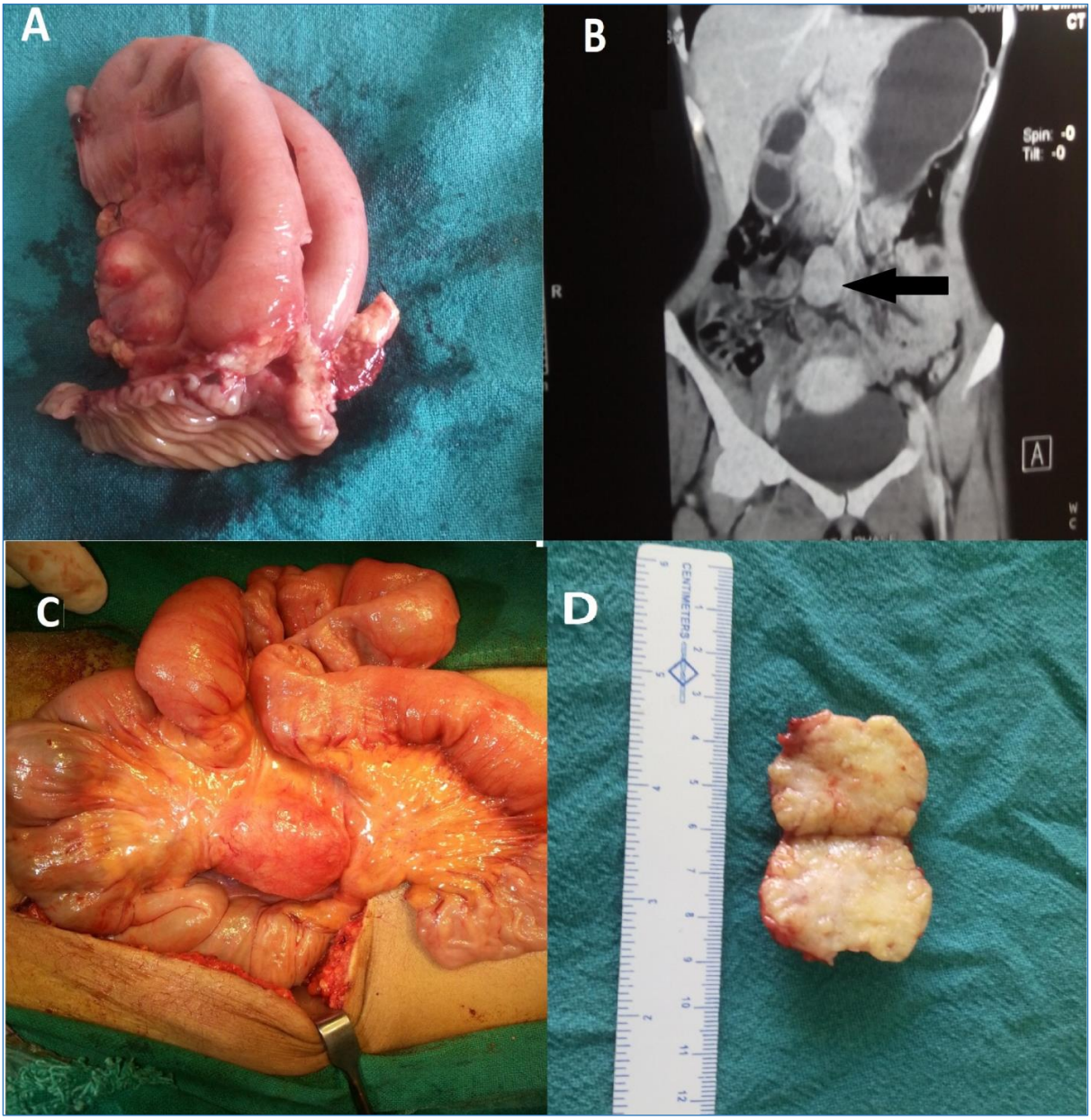

Figure 1. Figure 1: A- Ileal segment resected during first surgery showing the ulcerative lesion, B: CT scan after 15 months of first surgery showing metastatic lesion (black arrow), C: Operative picture during second surgery showing large mesenteric lymph nodes, D: Cut section of the large lymph node dissected during second surgery.

Conclusion

This case demonstrates that even in the presence of ovarian metastasis from ileal adenocarcinoma, aggressive surgical resection can achieve good outcomes. Clinicians should consider the possibility of long-term survival after complete resection and regular follow up for recurrence.

Author contribution

Conception, design: BPK, KDB; Data acquisition: BPK; Data analysis, interpretation: BS; Drafting: BPK, BS; Revision: BPK, KDB; Final approval of the version to be published: All; Agreement to be accountable for all aspects of the work: All.

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Conflict of interest

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Supplementary material

Data and supplementary material that support the findings of this study are available from the corresponding author upon reasonable request.

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