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Sarcomatoid Carcinoma of Small Intestine: A Case

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A 68-year-old man with underlying hypertension and ischemic heart disease was admitted to our centre for symptomatic anaemia. He complained of black stools suggesting upper gastrointestinal bleeding as the cause. His blood investigation showed a haemoglobin level of 5.1 g/dL. During admission, he developed abdominal distension, vomiting with no bowel movement. On examination, his abdomen was tense with hyperactive bowel sound. Abdominal computed tomography (CT) revealed an irregular circumferential mass arising from distal ileal wall measuring 9.4 cm in length and heterogenous contrast enhancement within it (Fig. 1). The mass was associated with luminal narrowing and proximal small bowel dilatation. Intraoperatively, there was a fungating mass arising from the distal ileum measured 110 mm×50 mm×50 mm, located 20 cm from the ileo-caecal junction. The mass was non-encapsulated and poorly circumscribed with areas of necrosis. It involved the entire wall of the ileum and invaded the adjacent sigmoid colon subserosa.

Microscopic examination showed a tumour composed of solid sheets of mixed spindle and epithelioid cells. The cells were arranged in intersecting fascicles and syncytial pattern. The cells displayed enlarged, pleomorphic vesicular nuclei, conspicuous nucleoli and eosinophilic cytoplasm. Mitoses were brisk, up to more than 30 per 10 hpf. Large areas of necrosis were present. One out of eleven lymph nodes exhibited malignant cell infiltration. Immunohistochemical studies showed that the malignant cells were positive for pan-cytokeratin and vimentin (Fig. 2). They were negative for LCA, CD34, SMA, desmin, S100 and CD117. A final diagnosis of sarcomatoid carcinoma and pathological staging of T4N1 was given. The patient was discharged 13 days after surgery with no postoperative complications.

Primary small intestinal epithelial neoplasms are rare, accounting only up to 2% of all malignant neoplasms of the gastrointestinal tract.[1] Sarcomatoid carcinoma of the small bowel is even more uncommon, with fewer than 35 cases reported to date and an incidence rate of 0.5-0.8 per 100,000 population per year.[2,3] This disease usually manifests in the sixth decade of life and carries a poor prognosis.[1,2] Clinically, the patient may present with abdominal pain, anaemia, gastrointestinal bleeding, intestinal obstruction, vomiting and weight loss[3,4] as seen in the case presented. Histological identification of mixed carcinomatous and sarcomatous components with a panel of immunohistochemical stains are required to arrive at the diagnosis.[4] At present, radical surgical removal is the optimal therapeut-

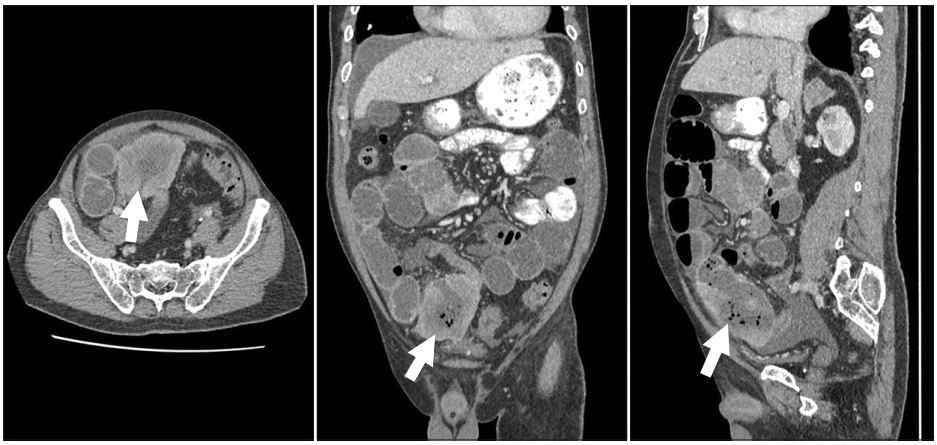

Fig. 1. CT abdomen (left to right: axial, coronal and sagittal views) showing an irregular circumferential mass (white arrow) arising from the distal ileal wall with appearance of aneurysmal dilatation measuring 9.4 cm in length with heterogenous contrast enhancement. The mass is associated with proximal small bowel dilatation.

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Article History:
Received November 10, 2020
Revised December 23, 2020
Accepted December 24, 2020

https://doi.org/10.4068/cmj.2021.57.1.89

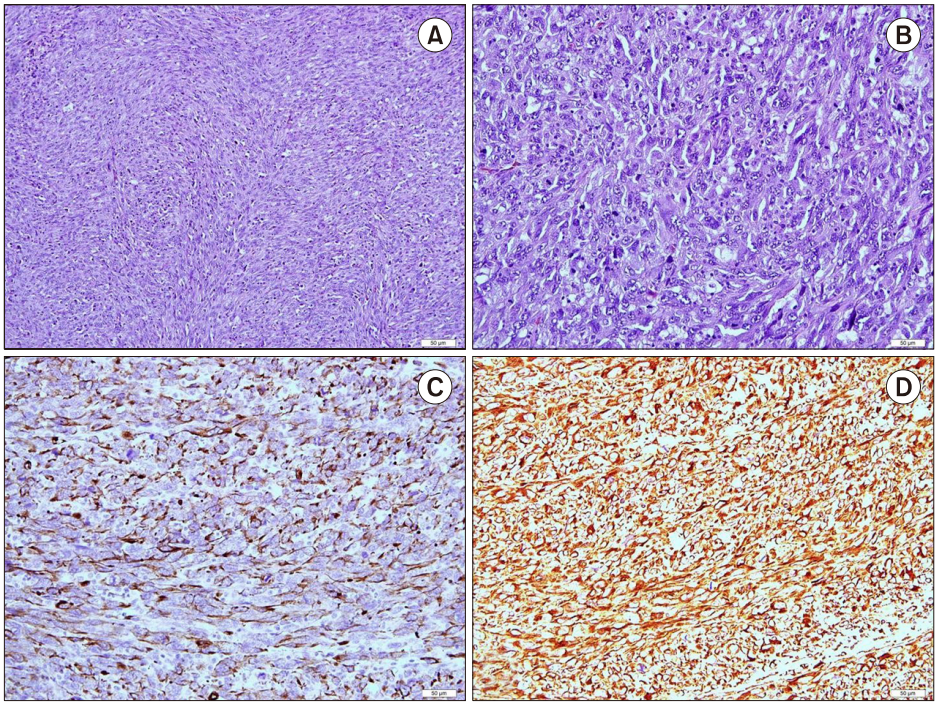

FIG. 2. Small bowel tumour composed of diffuse sheet of spindle (A: H&E, ×100) and bizarre epithelioid cells (B: H&E, ×200) that are positive for pan-cytokeratin (C: H&E, ×200) and vimentin (D: H&E, ×200).

ic approach as sarcomatoid carcinomas demonstrate a highly aggressive behaviour and other modalities have not been shown to improve survival substantially.[4]

CONFLICT OF INTEREST STATEMENT

None declared.

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