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Ileal Perforation Caused by Metastasis of Breast Carcinoma

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A 60-year-old woman underwent a radical mastectomy with the diagnosis of breast carcinoma. Pathological examination disclosed an invasive ductal carcinoma, scirrhous type, classified as pT1N2M0, stage IIIA, with positive hormone receptors and negative human epidermal growth factor receptor 2. The patient had adjuvant radiotherapy and chemotherapy with docetaxel. Endocrine therapy with anastrozole, followed by fulvestrant and toremifene citrate, had been performed; however, adrenal metastasis and hepatic metastasis appeared at the age of 69 and 71, respectively. At the age of 72, she developed bowel perforation (Fig. 1A) and underwent an emergent resection of the perforated ileal tumor (Fig. 1B). Pathological examination showed that tumor cells were similar to the primary breast carcinoma, confirming ileal metastasis (Fig. 2). Despite adjuvant chemotherapy, she died of carcinomatosis a year later.

Breast carcinoma metastasizes frequently to the lungs, liver, and bones. Factors that influence the metastatic site include the subtype of carcinoma.[1,2] Ductal carcinoma is more likely to metastasize to the lung, liver, and brain, whereas gastrointestinal and peritoneal metastasis is more prevalent in lobular carcinoma.[1,2] Although autoptic detection of intestinal metastasis is common,[1] clinical diagnosis of this metastasis is quite rare and 96 cases of this metastasis have been reported.[1] Most cases of intestinal metastasis are asymptomatic, whereas symptomatic cases, such as bowel obstruction, bleeding, and perforation usually present in an emergency setting. Among intestinal involvement, only eleven cases of perforation have been described in the English literature.[1-5] The interval between initial diagnosis of breast carcinoma and intestinal metastasis can be wide,[1,5] as shown in this case. In conclusion, as the number of patients with breast carcinomas is increasing and its prognosis has improved due to the recent therapeutic advances, the possibility of intestinal metastasis should be considered in cases with a history of breast carcinoma because this metastasis may cause emergent life-threatening complications.

CONFLICT OF INTEREST STATEMENT

None declared.

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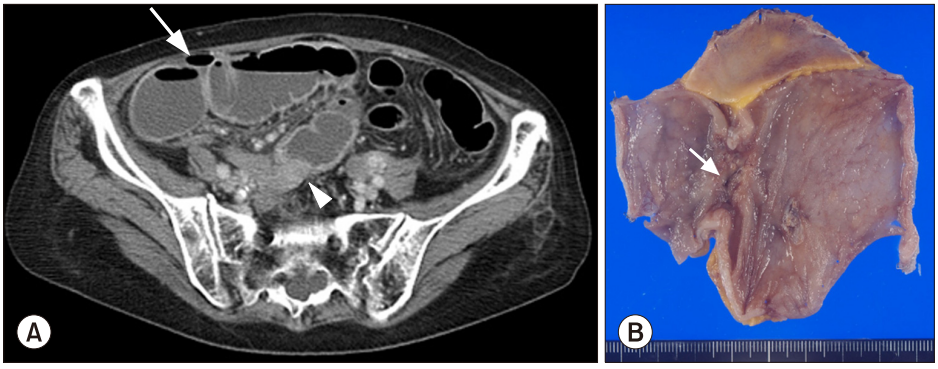

Fig. 1. (A) An abdominal computed tomography scan disclosed free air (arrow) and an obstructive tumor (arrowheads) with bowel dilatation in the ileum. (B) A resected specimen of the tumor presenting a deep ulceration (arrow).

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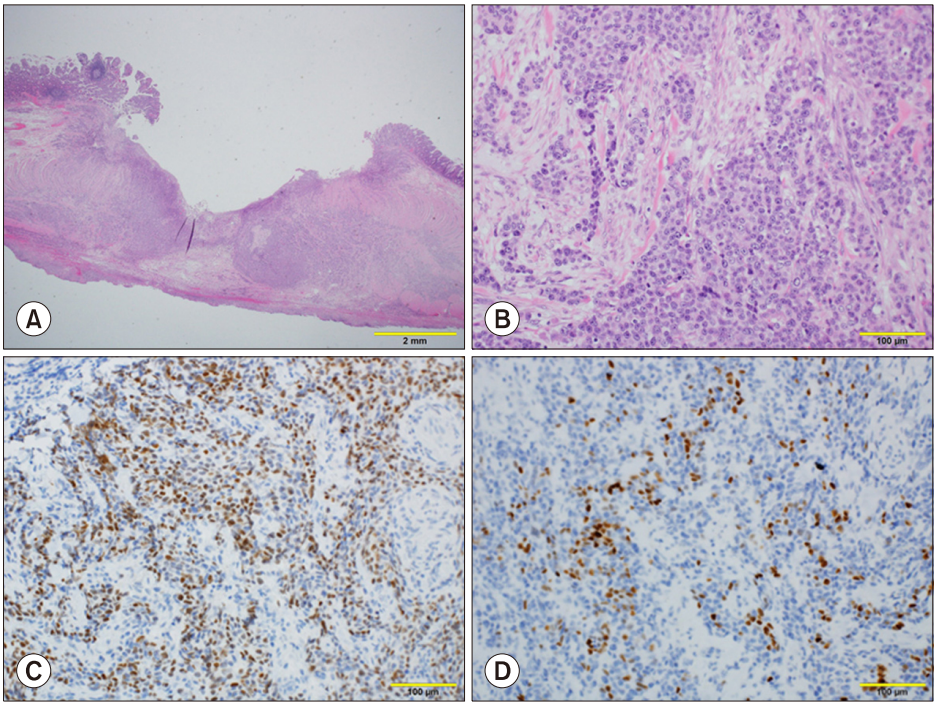

Fig. 2. Histopathological examination of the metastatic tumor. (A) The deeply ulcerated tumor invaded the serosa. (B) The tumor cells showed the nest formation and trabecular growth pattern, similar to the primary breast carcinoma (Hematoxylin and eosin). (C) Tumor cells were positive for immunostaining with estrogen receptor. (D) Tumor cells were positive for immunostaining with progesterone receptor, consistent with metastatic breast carcinoma.

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