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## LETTER TO THE EDITOR

## Recurrent intussusception caused by intestinal () constant metastasis of pulmonary pleomorphic carcinoma

## Dear Editor,

Gastrointestinal metastasis from lung carcinoma is usually asymptomatic [1]. Due to the rarity of pleomorphic lung cancer, there have been only a few reports regarding symptomatic gastrointestinal metastasis from pulmonary pleomorphic carcinoma [2,3]. Herein, we report a case of recurrent intussusception caused by multiple metastases of pulmonary pleomorphic carcinoma, with the hope that our experience will aid readers in clinical decisionmaking.

A 63-year-old male visited the emergency room due to abdominal distension and vomiting. Five months previously, he had undergone a left upper lobectomy of the lung because of pleomorphic lung cancer. The tumor was staged as pT2N2 and adjuvant concurrent chemoradiation therapy was applied.

An abdominal computed tomography (CT) scan showed a characteristic bowel-within-bowel appearance of the small bowel and a mass with wall enhancement that appeared to be the leading point of the intussusception. We performed an explorative laparotomy in which we found an ileo-ileal intussusception caused by a 2.7-cm-sized mass. The small bowel was resected and end-to-end anastomosis was performed. Final histology determined that the mass was a metastatic pleomorphic carcinoma originating from lung cancer (Fig. 1).

On postoperative Day 44, the patient revisited due to persistent vomiting and abdominal distension. The abdominal CT scan revealed dilatation of the proximal jejunum, and an onion-like appearance of the small bowel, which suggested intussusception. In view of the patient's past history and imaging studies, multiple intraabdominal metastases were suspected as the cause of the intussusception. On positron emission tomography–CT, intense uptake was present in the mediastinal lymph nodes, bone, and intestine. The patient underwent explorative laparotomy, which discovered a jejunal obstruction caused by jejuno-jejunal intussusception consisting of a 3.7-cm mass.

Because intestinal intussusception caused by secondary metastasis may cause bowel obstruction, intestinal necrosis, and bleeding, surgical intervention is necessary in almost every case [2]. The extent of surgery should be decided with discretion. The first option would be to perform a radical resection for the purposes of controlling metastatic disease and improving long-term survival. A second option would be to perform a palliative resection in order to solve an acute obstruction, thereby minimizing the possibility of complications. The extent of the surgery should also be decided based on the overall condition and prognosis of the patient. Therefore, when considering surgical resection, cautious evaluation of the patient's history and current disease status is mandatory. Although the prognosis of gastrointestinal metastasis from lung cancer is very poor [1,4], there are reports that show better survival of more than 2 years following small bowel resection [4,5]. In our case, the patient underwent palliative resection in the first operation resulting in a recurrent intussusception from another lesion. Therefore, performing palliative resection for every patient may be controversial.

Although pulmonary pleomorphic carcinoma and intussusception caused by pulmonary carcinoma are very rare, clinical suspicion of intestinal metastasis should be considered. Surgeons should carefully evaluate the patient's overall condition and the disease status when considering the extent of the operation. Furthermore, clinicians should also carefully explore the intra-abdominal

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**Figure 1.** (A) Computed tomography demonstrates dilated intestinal loops and bowel-within-bowel appearance with an enhanced mass (arrow) in the first intussusception. (B) Computed tomography shows recurrent intussusception in the jejunum (arrow). (C) Jejunojejunal intussusception with leading mass is discovered during laparotomy.

organs in order to avoid overlooking the possibility of multiple metastases.

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