### REFERENCES

- 1. Kosugi C, Furuse J, Ishii H, et al. Needle tract implantation of hepatocellular carcinoma and pancreatic carcinoma after ultrasound-guided percutaneous puncture: clinical and pathologic characteristics and the treatment of needle tract implantation. World J Surg 2004; 28: 29-32.
- 2. Ishii H, Okada S, Nose H, et al. Local recurrence of hepatocellular carcinoma after percutaneous ethanol injection. Cancer 1996; 77: 1792-6.
- Sato S, Shiratori Y, Imamura M, et al. Power Doppler signals after percutaneous ethanol injection therapy for hepatocellular carcinoma predict local recurrence of tumors: a prospective study using 199 consecutive patients. J Hepatol 2001; 35: 225–34.
- 4. Tateishi R, Shiina S, Teratani T, et al. Percutaneous radiofrequency ablation for hepatocellular carcinoma. An analysis of 1000 cases. Cancer 2005; 103: 1201-9.
- Cedrone A, Rapaccini GL, Pompili M, et al. Neoplastic seeding complicating percutaneous ethanol injection for treatment of hepatocellular carcinoma. Radiology 1992; 183: 787-8.
- 6. Martinez RD, Villegas CC, Senent VV, et al. Subcutaneous seeding of hepatocellular carcinoma after fine-needle percutaneous biopsy. Rev Esp Enferm Dig 2007; 99: 354-7.
- 7. Malik STA, Naylor MS, East N, et al. Cells secreting tumour necrosis factor show enhanced metastasis in nude mice. Eur J Cancer 1990; 26: 1031-4.

## Burhan ÖZDİL<sup>1</sup>, Hikmet AKKIZ<sup>1</sup>, Macit SANDIKÇI<sup>1</sup>, Can KEÇE<sup>2</sup>, Arif COŞAR<sup>3</sup>

Department of 'Gastroenterology, Çukurova University, School of Medicine, Adana

Department of <sup>2</sup>Gastroenterological Surgery and <sup>3</sup>Gastroenterology, Research Hospital, Trabzon

# A case of acute small bowel obstruction due to metastasis of undiagnosed primary carcinoma of the lung

Tanı konmamış primer akciğer kanseri metastazına bağlı gelişen akut ince barsak obstruksiyonu olgusu

### To the Editor,

A 75-year-old man was admitted to our department with abdominal pain, nausea and vomiting. He was a heavy smoker (a packet/day/60 years) with chronic obstructive pulmonary disease. There were diminished breath sounds and dullness over the left lung, and examination of the abdomen revealed a diffusely tender abdomen with rebound and guarding. Rectal examination revealed Hematest-negative stool. Abdominal plain X-ray demonstrated air-fluid levels. Preoperative chest X-ray showed irregular increased density in the left lung hilus (Figure 1). Thorax computed tomography (CT) showed a tumor at the carina level in the left lung hilar area with vascular invasion. At

Address for correspondence: Abuzer Dirican İnönü University, Faculty of Medicine Department of General Surgery 44315 Malatya, Turkey Phone: + 90 422 341 06 60 • Fax: + 90 422 341 07 28 E-mail: adirican@inonu.edu.tr laparotomy, a mass was found in the ileum that obstructed the ileum completely with invasion of its mesentery. Segmental ileal resection with endto-end anastomosis was performed. Subsequent histological section of this tumor revealed metastatic adenocarcinoma of the lung. Sputum cytology revealed malignant epithelial cells. Bronchoscopy on the fourth postoperative day revealed endobronchial lesion, which was totally obstructing the left upper and lower segments. Bronchial brushing demonstrated adenocarcinoma of the lung. The patient was accepted as stage IV lung carcinoma. Postoperatively, hospital pneumonia developed and after its treatment, the patient was disc-

Manuscript received: 31.12.2007 Accepted: 19.03.2009

doi: 10.4318/tjg.2009.0035



**Figure 1.** Preoperative chest X-ray showed irregular increased density in the left lung hilus.

harged on the 20th day. During follow-up, the patient died in the 10th week postoperatively at home with tumor progression.

In a report of 54 patients with small bowel tumors, 42 had malignant lesions and 6/42 (14%) were metastases (1). Small bowel hematogenous metastases are a rare clinical occurrence and originate typically from breast cancer, lung cancer and ma-

#### REFERENCES

- 1. Naef M, Buhlmann M, Baer HU. Small bowel tumours: diagnosis, therapy and prognostic factors. Langenbecks Arch Surg 1999; 384: 176-80.
- 2. Washington K, McDonagh D. Secondary tumours of the gastrointestinal tract: surgical pathologic findings and comparison with autopsy survey. Mod Pathol 1995; 8: 427-33.
- Shields TW. Presentation, diagnosis, and staging of bronchial carcinoma of the asymptomatic solitary pulmonary nodule. In: Shields TW, ed. General thoracic surgery. Baltimore: Williams and Wilkins, 1994; 1122-54.
- Gitt SM, Flint P, Fredell CH, Schmitz GL. Bowel perforation due to metastatic lung cancer. J Surg Oncol 1992; 51: 287-91.

lignant melanoma (1, 2). Small bowel metastases may occur in every cell type of primary lung cancer. Our patient was not known as primary lung carcinoma, and he was admitted with the sign of intestinal obstruction.

In most of the cases, clinical findings of small bowel metastases consist of acute symptomatology such as perforation and peritonitis, small bowel obstruction or hemorrhage. Moreover, other symptoms, such as asthenia, anemia following occult intestinal chronic bleeding, abdominal pain and weight loss, and nausea and vomiting are generic and specific (4, 6). Symptomatic small bowel metastases may require a surgical approach. The procedure of choice is theoretically resection of the involved small intestine with primary enteroenterostomy (7). Nevertheless, the prognosis is considered to be very poor. Optimal management of treatment remains controversial, with no operative policy or aggressive surgery. Aggressive abdominal surgery, despite its poor prognosis, provides good palliation and reasonable survival in a select group of patients (8).

If a patient has acute intestinal obstruction and suspicious tumoral lesion on chest X-ray or on thorax CT, the possibility of small bowel metastasis from primary lung carcinoma should be kept in the mind despite the rarity of its occurrence.

- Dalton ML, Simon KB, Gatling RR, Koury AM. Large cell carcinoma of the lung with isolated jejunal metastasis. J Miss State Med Assoc 1989; 30: 361-3.
- Antler AS, Ough Y, Pitchumoni CS, et al. Gastrointestinal metastasis from malignant tumors of the lung. Cancer 1982; 49: 170-2.
- Hillenbrand A, Strater J, Henne-Bruns D. Frequency, symptoms, and outcome of intestinal metastases of bronchopulmonary cancer. Case report and review of the literature. Int Semin Surg Oncol 2005; 2: 13.
- 8. Goh BK, Yeo AW, Koong HN, et al. Laparotomy for acute complications of gastrointestinal metastases from lung cancer: Is it a worthwhile or futile effort? Surg Today 2007; 37: 370-4.

Cengiz ARA, Abuzer DİRİCAN, Dinçer ÖZGÖR, Turgut PİŞKİN

Department of General Surgery, İnönü University, School of Medicine, Malatya