## Giant subcutaneous HCC case occurring after percutaneous ethanol injection

Perkütan etanol enjeksiyonu sonrası görülen dev ciltaltı HCC olgusu

To the Editor,

Percutaneous ethanol injection (PEI) has been preferred extensively over the past few years for the treatment of primary and metastatic liver neoplasms. It has been the most widely used method among other percutaneous ablation procedures. Generally, this technique is considered a safe, easily performed, highly effective and repeatable procedure in hepatocellular carcinoma (HCC) treatment. However, a variety of immediate or delayed major complications may occur during or after the PEI procedure. Tumor implantation along the pathway of the instrument can occur during the long-term follow-up. The reported incidence of needle tract implantation of HCC after PEI ranges from 1.1 to 2% (1).

We report a 76-year-old man who had an eight-year history of chronic liver disease secondary to hepatitis B virus. On ultrasonography and computed tomography, a lesion 3.5 cm in diameter was detected. Alpha-fetoprotein (AFP) was 256 ng/ml (normal range: 0-6 ng/ml). Four courses of PEI treatment were administered. Two months after the last injection, a subcutaneous mass of 15 cm was observed at the site of the puncture (Figure 1). It was confirmed as HCC histologically by percutaneous biopsy. The AFP level was determined as 1860 ng/ml. Based on these results, subcutaneous seeding was considered to have occurred during PEI administered for HCC.

Percutaneous ethanol injection has become the method of choice for solitary HCC lesions smaller than 3 cm (2, 3). Although the needle is quite fine and alcohol has been considered to sterilize the needle tract and prevent implantation by killing tumor cells, malignant seeding is an important complication of the procedure. In the radiofrequency ablation therapy report by Tateishi et al. (4), the usual time interval between the procedure and diagnosis of needle tract implantation was 17

months. As far as we know, the largest metastatic cutaneous tumor reported in the literature was 3.4 to 4 cm in size (5, 6). The growth rate of needle tract tumor implantation after PEI varies depending on numerous factors. The local tissue damage, microenvironment surrounding the implanted tumors and increased tumor necrosis factor (TNF) level might be the reasons for the aggressive development of the present tumor. In a similar giant metastatic case, it was reported that TNF promoted the metastatic characteristic of the tumor cells and their motilities along the damaged tissue (7).

Percutaneous ethanol injection therapy is a low risk and safe treatment for small HCCs, but can lead to needle tract implantation. Therefore, the clinician must keep in mind that rapid and aggressive growth of implanted tumors can occur in a short time period.



**Figure 1.** Subcutaneous seeding 15 cm in diameter occurred after PEI treatment.

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## 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

laparotomy, a mass was found in the ileum that obstructed the ileum completely with invasion of its mesentery. Segmental ileal resection with end-to-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-

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