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Liver penetration of duodenal ulcer

Karaciğer penetrasyonu yapmış duodenal ülser

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Liver penetration is a rare complication of peptic ulcer disease. Histopathological examination of endoscopic biopsy is essential for diagnosis as well as sonographic and computerized tomography imaging. Endoscopic examination could not exclude tumor without pathologic examination. Herein, we report a patient diagnosed as duodenal ulcer penetration into liver by endoscopic biopsy.

Key words: Peptic ulcer, liver, penetration, NSAID, astrocytoma

Karaciğer penetrasyonu, peptik ülserin nadir rastlanılan bir komplikasyonudur. Görüntüleme yöntemlerinin yanısıra tanıda altın standart endoskopik biyopsinin histopatolojik incelenmesidir. Endoskopik görüntü çoğu zaman tümör ile ayırımı yapamayabilir. Burada, karaciğer penetrasyonu yapmış duodenal ülserli bir olgu sunulmaktadır.

Anahtar kelimeler: Peptik ülser, karaciğer, penetrasyon, NSAI, astristoma

INTRODUCTION

Liver penetration is one of the most serious complications of peptic ulcer disease and is very rarely seen. The diagnosis is very difficult by endoscopic examination and is usually revealed by histopathological examination (1-3). There are limited reports about liver penetration of peptic ulcer and they are usually case reports. Herein, we report a patient with liver penetration of peptic ulcer diagnosed by endoscopic biopsy examination.

CASE REPORT

A 21-year-old women was admitted to the endoscopy unit with suspicion of upper gastrointestinal system bleeding. She described melena 10 days previously without abdominal pain. She was operated due to astrocytoma in the neurosurgery unit a month previously and diclofenac and narcotic analgesic drug administration were applied because of headache in perioperative period. Postoperatively she could not be discharged due to meningoencephalitis, for which systemic antibiotherapy was administered. There was no pathologic feature on abdominal examination. Laboratory findings were within normal limits. Endoscopic examination revealed giant ulcer without prominent crater at the anterior wall of bulbus and bulky ulcer margins (Figures 1, 2). Endoscopic biopsy was performed from the ulcer margin. That imaging was firstly considered as ulcer and also possessed suspicion of tumor. Finally, histopathological examination of endoscopic biopsies showed liver tissue (Figure 3). Omeprazole 2x20 mg was given per orally. Meningoencephalitis could not be controlled with medical therapy and she was followed in the intensive care unit. She died due to meningo-

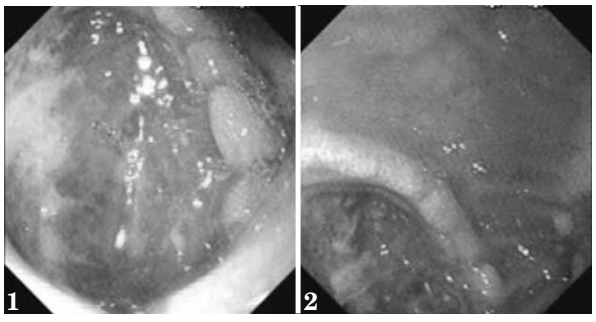

Figure 1-2. Endosopic imaging of giant ulcer on the anterior wall of bulbus

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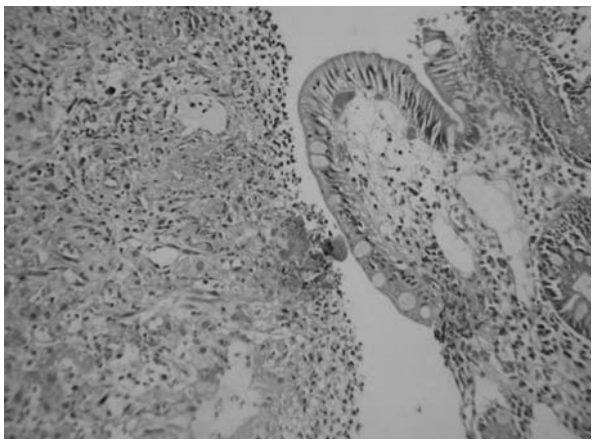

Figure 3. Liver tissue has erosion on the superficial area, and mucosa of the bulbus is seen on the right (hematoxylin and eosin x 20)

encephalitis and sepsis one month after diagnosis in the intensive care unit despite all supportive medical therapy.

DISCUSSION

Liver penetration is a rare and serious complication of peptic ulcer disease. The serious complications of peptic ulcer, especially penetration and perforation, have decreased in time and after common administration of proton pump inhibitors. Organ penetration, such as of pancreas, gastrohepatic omentum, biliary system and liver, was reported as 8% in 417 patients who had surgical treatment due to peptic ulcer disease (1, 2). There is limited data about this issue since the diagnosis only can be done by surgery or when endoscopic biopsy examination reveals it. Kayacetin et al. (3) reported that there were 13 cases with liver penetration of peptic ulcer, four of which were duodenal ulcer complications.

The main clinical presentation in most of the patients with peptic ulcer penetration as reported previously has been upper gastrointestinal system bleeding. Medical history in the present case revealed upper gastrointestinal system bleeding a week before endoscopic examination. Surgical operation and non-steroidal anti-inflammatory drug (NSAID) administration are the culprit factors for peptic ulcer in the present case. It is very interesting that the patient did not have abdominal pain or any abdominal finding on physical examination. That is variance between diagnosis and symptoms resulted from different analgesic drug administration in the neurosurgery unit.

It is reported that computerized tomography imaging and endoscopic ultrasonography could show penetration of peptic ulcer without biopsy and histopathological examination (4, 5). In addition, Sezgin et al. (6) demonstrated two cases with abdominal wall penetration of peptic ulcer by transabdominal ultrasonographic examination before surgery. However, endoscopic examination usually cannot exclude tumor and histopathological examination is essential for the diagnosis. In our patient we did not see a prominent ulcer crater. At first we considered it as a tumor and finally endoscopic biopsies showed liver tissue. We did not perform computerized tomography and endoscopic ultrasonography since it would not have been ethical after the results of the histopathologic examination of endoscopic biopsies.

In conclusion, liver penetration of peptic ulcer is a rarely seen condition; endoscopic examination could not diagnose or exclude tumor without biopsy and histopathological examination. Endoscopic ultrasonography and computerized tomography can support the diagnosis. The suspicion of this condition on endoscopic examination can be helpful for diagnosis.

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