



Unusual Presentation of Hepatocellular Carcinoma That Mimics Epigastric Hernia: A Case Report

Epigastrik Herniyi Taklit Eden Hepatoselüler Karsinomun Olağan Dışı Yerleşimi: Olgu Sunumu

Melih AKINCI¹, Zafer ERGÜL¹, Kerim Bora YILMAZ¹, Engin ÖLÇÜCÜOĞLU¹, Hakan KULAÇOĞLU¹

¹ SB Dışkapı Yıldırım Beyazıt Eğitim ve Araştırma Hastanesi, 4. Genel Cerrahi Kliniği, ANKARA

SUMMARY

A case of a 72-year-old woman with painful abdominal-wall mass which presented with hepatocellular carcinoma of medial segment of the left hepatic lobe that mimics epigastric hernia without abdominal incision is described. Hepatic carcinoma herniation that mimics epigastric hernia is unusual because of the lack of published cases similar to this one. In addition, the published other malignant herniation cases is briefly reviewed.

Key Words: *Hepatocellular carcinoma, epigastric hernia, abdominal-wall mass.*

ÖZET

Abdominal insizyon olmadan karaciğer sol lob medial segmentteki hepatoselüler karsinomun ağrılı karın duvarı kitlesi ile epigastrik herniyi taklit ettiği 72 yaşında kadın hasta sunulmuştur. Buna benzer bir olgunun yayınlanmamış olması bu epigastrik herniyi taklit eden hepatic karsinom fıtıklaşmasını ilginç yapmaktadır. Ek olarak yayınlanmış diğer malign herniasyon olguları kısaca gözden geçirilmiştir.

Anahtar Kelimeler: *Hepatoselüler karsinom, epigastrik herni, karın duvarı kitlesi.*

INTRODUCTION

A wide variety of ventral hernias may occur as painful abdominal-wall masses. The causative factors are related to the condition of the patient, the main disease and if it is incisional hernia, also related to the surgical techniques and postoperative complications. The herniation of the malignant left hepatic lobe through the abdominal wall without incisional hernia is a very rare condition.

Solitary tumors in the hernia sacs in other than inguinal location has been very rarely reported. One case of solitary fibrous tumor of peritoneum in midepigastric ventral hernia and another case with isolated clear cell adenocarcinoma in scar endometriosis mimicking an incisional hernia were reported (1,2). We would like to report the first case with painful abdominal-wall mass which presented with hepatocellular carcinoma of medial segment of the left hepatic lobe that mimics epigastric hernia without abdominal incision.

CASE REPORT

A 72-year old woman was admitted to our clinic with a palpable epigastric mass which had been realized five years ago. At the beginning, the mass was mobile and approximately 2 cm in diameter with no pain. In the following four years the size of the mass increased to 5 cm in diameter and became painful and immobile. Six months ago, she went to the doctor with these complaints and her abdominal ultrasonography was normal except left renal 22 mm, 24 mm cortical cysts and grade I hepatosteatorosis. Her superficial abdominal ultrasonography revealed 55 x 34 x 61 mm mass which was protruding from 13 mm fascial defect, 4 cm superior to the umbilicus. That clinical presentation was interpreted as omental herniation. Although surgery was the recommended therapy it was delayed for six months due to her pneumonia. After this period her control abdominal ultrasonography showed left renal 24 mm, 37 mm cortical cysts, grade II hepatosteatorosis and supravesical-prevesical fluid accumulation. Her superficial abdominal ultrasonography revealed 55 x 34 x 61 mm mass which was protruding from a 14 mm fascial defect, 5 cm superior to the umbilicus. At that time the situation had been interpreted as incarcerated omental herniation that did not change by the valsalva maneuver. Tumor markers were negative and the surgery was planned. In laparotomy it was observed that the mass which protruded through a 15 mm abdominal fascia defect was originating from the fourth segment of left hepatic lobe (Figure 1,2). The only content of the hernial sac was the hepatic tissue, stuck by the edges of fascia. There was not any other content such as omentum. The mass was transected with little hepatic tissue for pain relief and pathologic examination. With further exploration ascites fluid and peritoneal carcinomatosis was observed and irregular left ovarian 2 cm nodule was palpated but there were no other palpable hepatic mass. Postoperative control abdominal computed tomography revealed right perihepatic, supravesical peritoneal thickness and a 10 mm cyst in left ovary region, multiple left renal cortical cysts and no other hepatic masses. The biggest of the multiple lymphadenopathies was 15 mm in diameter and was located at the left gastric region of anterior gastric cardia (Figure 3). The patient had no postoperative complications and was discharged at postoperative eighth day. The pathological examination of specimen was reported as hepatocellular carcinoma.

DISCUSSION

In the presented case, epigastric hernia was the presumed diagnosis because of the location of the



Figure 1. Irregular hepatic mass in the transected hernial sac.



Figure 2. Irregular hepatic mass originated from the fourth segment of left hepatic lobe.

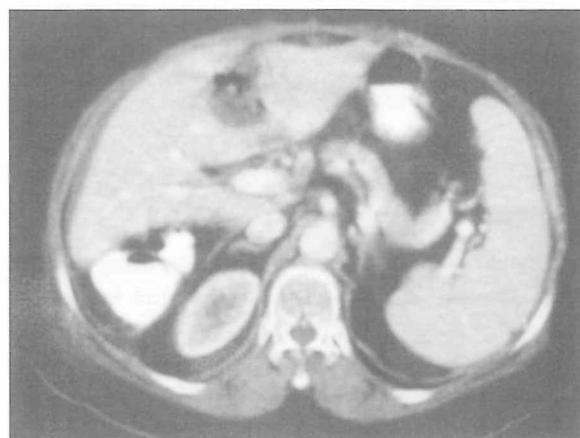


Figure 3. The resected area showed on the fourth segment of left hepatic lobe.

mass. A mass becomes painful particularly if the hernia causes incarceration or strangulation. Indeed an incisional hernia is generally considered, especially when there is a previous laparotomy. However there was no previous laparotomy or any surgical incision in this case. Convenient history with hernia, physical examination and radiologic findings of this painful mass were interpreted as an epigastric hernia and surgery was planned for herniorraphy.

The case reported illustrates an instance of hepatocellular carcinoma (HCC) as a semi mobile mass which grew up into the abdominal wall. Its presentation was unique as it displayed an epigastric hernia and presented in the anterior abdominal wall. Tumor markers were negative and there was no intra-abdominal pathology in preoperative radiologic screening. Indeed HCC is one of the most common malignant tumors worldwide that it was estimated with 21.000 new cases for 2008 and a serious malignancy associated with a historical 5-year survival rate of less than 5% (3,4). The major etiologies and risk factors for the development of HCC are well defined and some of the multiple steps involved in hepatocarcinogenesis have been elucidated in recent years. Despite these scientific advances and the implementation of measures for the early detection of HCC in patients at risk, patient survival has not improved during the last three decades (5). This is due to the advanced stage of the disease at the time of clinical presentation and limited therapeutic options. Although the therapeutic options and staging of HCC are out of this case report, we want to point out that ascites and numerous tumors of various sizes in the abdominal serosa, omentum, and diaphragm which were positive in the case were indicators of disseminated diseases. As well as HCC with massive peritoneal dissemination as in our case is also an unusual presentation (6).

In literature there were few reports of hepatic herniation and all of these herniations were due to incisional defect or trauma. In one an incarcerated incisional hernia associated with medial segment of the left hepatic lobe and in other a traumatic handlebar hernia associated with herniation of the liver was reported (7,8). As seen in these kinds of reports the herniated hepatic tissue was also normal. Hepatic herniation as the mass of HCC without trauma and incisional herniation is very rare condition and only special to this case.

Tumours have been described in umbilical, para-umbilical, femoral, and incisional herniae, and also

in enterocoeles (9). Colonic cancer, usually arising in the sigmoid, is the most common cancer found in any hernia, but prostate, pancreas, ovary, bile duct, tonsil, stomach, pericardium, skin, appendix, bladder and thymus malignancies have also been reported (9). The malignant tumour and hernia togetherness has been generally reported to be localized in the groin area. However only less than 0.5% of inguinal hernia cases have malignant tumours in their hernial sacs (10). Besides there were few reports of solitary tumors in the hernia sacs of other abdominal regions. In one report, solitary fibrous tumors of peritoneum in midepigastric ventral hernia demonstrating plump spindle cells with keloidal collagen and in other one isolated clear cell adenocarcinoma in scar endometriosis 30 years after an open tubal sterilization mimicking an incisional hernia were reported (1,2). However in these cases abdominal wall layers thickening due to the malignant infiltration mimic hernias and there were no herniation of abdominal contents. Besides the second one had previous surgery that does not match with our report. Indeed Lejars classified the malignant tumors presenting in inguinal hernias into three groups based on the anatomical relationship with the hernia sac: intra-saccular, saccular (primary or metastatic lesions involving the peritoneum of the sac), and extra-saccular (11). These two cases had saccular tumours that are different than this report which had an intrasaccular one.

There are also reports as contrast with this case that hepatic hernia mimics tumor as supradiaphragmatic liver due to the diaphragmatic herniation mimics a pulmonary tumor (12,13). However in our search hepatic carcinoma herniation that mimics epigastric hernia is sole in literature.

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