

Case Report*Open Access, Volume 2***Transitional cell carcinoma of the bladder with hepatoid differentiation: A case report****Selim Tas; Ali Erhan Eren****Antalya Provincial Health Directorate, Antalya Training and Research Hospital, Turkey.****Corresponding Author: Ali Erhan Eren**

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Introduction

Hepatoid adenocarcinoma is a very rare disease and usually occurs in the stomach, ovaries and lungs. The term hepatoid adenocarcinoma was first introduced by Ishikura et al. in 1985 to describe a rare aggressive malignant neoplasm in the urinary bladder [1,3].

Case presentation

A 59-year-old male patient with hematuria was admitted to our emergency department with the complaint of deterioration of the general condition. The complete blood count detected a hemoglobin level of 4 mg/dl. 4vünites erythrocyte suspensions were transfused. The medical history showed complaints of hematuria for the last 6 months. Computed tomography imaging study showed multiple millimetric masses in the liver that completely filled the bladder.



Figure 1: View of bladder tumor on CT imaging.

The patient was scheduled for cystoscopic examination. Cystoscopic examination revealed a tumor that completely filled the inside of the bladder. Subsequently, incomplete Transurethral Resection of Bladder Tumor (TURBT) was performed. Pathological examination resulted in HAC invading muscle. Tumor cells were microscopically typed as a hepatocellular carcinoma containing large and polygonal cells with marked nuclear atypia and eosinophilic granular or clear cytoplasm.

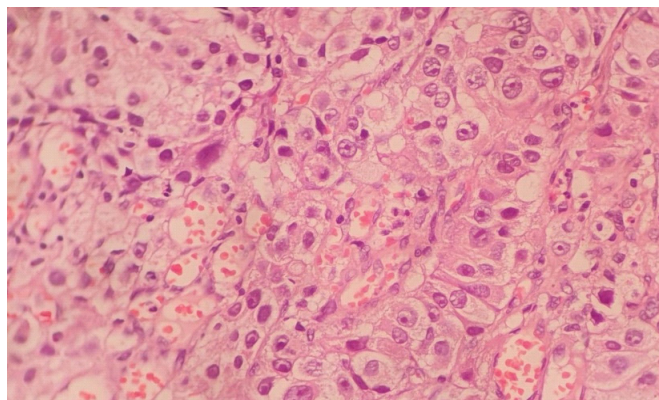


Figure 2: Tumor tissue consisting of atypical epithelial cells with narrow fibrocapsular stroma and large-pale eosinophilic hepatoid cytoplasm. Hematoxylin-eosin staining, 40X magnification. Immunohistochemical staining results are positive for α -fetoprotein (AFP).

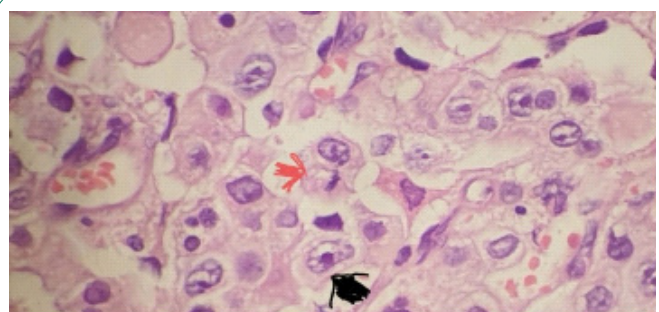


Figure 3: Red arrow showing mitosis and black arrow showing hepatoid, atypical cell with coarse nuclei.

Serum concentration of AFP was within normal limits. Liver function test results were within the normal reference range. The levels of serological markers for HBV and HCV were also within normal limits. In the staging study, thoracic CT imaging showed normal pulmonary structures, but hepatic USG examination showed multiple metastatic lesions with millimetric sizes and isoechoic and heterogeneous structures. On the second postoperative day, a thrombosis was detected in the right iliac vein. The patient was scheduled for chemotherapy and concurrent radiotherapy died at 2 months of follow-up.

Discussion

In the literature, the term "Hepatoid" has been used to denote a heterogeneous type of tumor in various organs [3-9] which can be subdivided into three broad categories. Hepatoid adenocarcinomas are extrahepatic tumors that have areas morphologically comparable with hepatocellular carcinomas [10, 11].

Metzgeroth et al. published a review of 262 patients with HAC. Gastric involvement had the highest rate with 63%. Stomach (63%) had the highest rate of involvement, followed by ovaries (10%), lungs (4%), gall bladder (3%), pancreas (4%), uterus (4%) and urinary bladder (3%). HAC usually occurs in elderly patients. The male/female ratio was 2.4/1 and the median age at diagnosis was 65 years [12].

From a clinical point of view, it may be appropriate for pathologists to assist clinicians in establishing the correct diagnosis of primary hepatoid adenocarcinoma and thus ensuring appropriate management of patients [8,13,14]. It has been shown that carcinomas with hepatoid features, regardless of AFP production, have a worse prognosis than AFP-producing carcinomas without hepatoid morphological features [6].

In a case report on 4 patients, A. Lopez-Beltran et al. showed that a low pathological stage of the tumor (pT1) may be associated with longer survival times [15]. Ishikura H. et al. HAC case (stage I) in renal pelvis has seen similar findings. It was treated with a local excision procedure [6]. In a case report, Sekino Y. et al. performed transurethral resection and detected HAC (pT1) in the urinary bladder. Moreover, they did not detect any recurrence during the 20-month follow-up [2].

As seen in our case, normal serum levels of AFP and a muscle-invasive HAC (pT2) have negative effects on survival times. Hepatoid adenocarcinoma is a highly aggressive tumor that mimics the histological appearance of hepatocellular carcinoma. Current data show a close relationship between the pathological stage at diagnosis and survival times.

Conclusion

HAC is a highly aggressive tumor that mimics the histological appearance of hepatocellular carcinoma. AFP-producing HACs have a more aggressive course than non-AFP-producing HACs. There are very few published reports reporting HAC in the urinary bladder. It is important to be aware of atypical localizations of cancers in order to establish an accurate diagnosis.

Patient consent

Written informed consent was obtained from patient before surgery, and our study was conducted according to the permission of patient

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