

An unusual case of hepatic carcinosarcoma

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SUMMARY: An unusual case of hepatic carcinosarcoma.

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We report a rare case of a hepatic carcinosarcoma with rhabdomyosarcomatous differentiation in its sarcomatous component.

A 71-year old Caucasian female patient underwent a liver resection for a 4-cm lesion developed on an underlying HCV-related cirrhosis. Post-operative course was uneventful and the patient was discharged 5 days after surgery.

At pathology, the tumor presented the features of hepatocellular carcinoma and rhabdomyosarcoma. Three months later the patient experienced a liver recurrence, dying 2 months later for systemic disease.

The reported case presents several peculiarities, i.e. the female gender, the HCV-related cirrhotic status, and the European origin of the patient. However, the outcome of our case confirms that this neoplasm pursues a highly aggressive course with poor prognosis.

RIASSUNTO: Un raro caso di carcinosarcoma epatico.

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Riportiamo un raro caso di carcinosarcoma epatico con differenziazione rhabdomyosarcomatosa nella sua componente sarcomatosa.

Una donna caucasica di 71 anni è stata sottoposta a resezione epatica per una lesione di 4 cm di diametro sviluppatasi su cirrosi HCV-correlata. Il decorso post-operatorio è stato privo di complicanze e la paziente è stata dimessa cinque giorni dopo l'intervento chirurgico.

All'esame istologico, il tumore ha presentato le caratteristiche dell'epatocarcinoma e del rhabdomyosarcoma. Tre mesi dopo la paziente ha presentato una recidiva epatica che ha portato in due mesi al decesso per diffusione sistemica della neoplasia.

Il caso riportato presenta varie peculiarità, quali il sesso femminile, lo stato di cirrosi HCV-correlata e l'origine europea della paziente. Tuttavia, l'esito conferma che questa neoplasia ha un decorso molto aggressivo, con prognosi infausta.

KEY WORDS: Hepatocellular carcinoma - Carcinosarcoma - Surgery.
Epatocarcinoma - Carcinosarcoma - Chirurgia.

Introduction

Primary hepatic carcinosarcoma is a malignant tumor composed by mixed carcinomatous (hepatocellular or cholangiocellular) and sarcomatous elements tightly linked (1). No more than 25 cases of this tumor have been previously properly described and published in the English literature (2), only 5 of them being from Western experiences (3-7).

Case report

We report a case of a 71-year old Caucasian female patient admitted to our Unit due to the presence of an asymptomatic liver tumor accidentally discovered during a routinely evaluation for a post-hepatitis C cirrhosis.

At admission, alpha-fetoprotein was increased (441 U/ml; n.v. < 10 U/ml). Preoperative imaging techniques confirmed the presence of a 4-cm mass involving the 5th epatic segment.

A segmentectomy was performed, with the removal of both the lesion and two satellite lesions. Post-operative course was uneventful and the patient was discharged 5 days after surgery.

At pathology, the tumor presented several trabecular, acinar and solid areas. Immunohistochemically, cells in the trabeculo-acinar areas stained positively for cytokeratin 7, alpha-fetoprotein and alpha-1-antichymotrypsin, in agreement with the diagnosis of hepatocellular carcinoma. Conversely, cells in the solid areas were positive for vimentin and striated muscle actin, showing indeed the features of a rhabdomyosarcoma (Figs 1 and 2). Three months later, the patient

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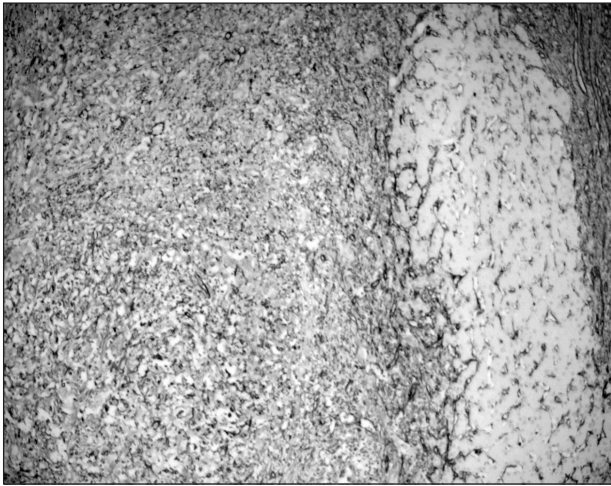


Fig. 1 - Tumor section stained immunohistochemically for vimentin. Several malignant cells in the left side of the figure show brownish staining of their cytoplasm, whereas only the stromal connective framework is outlined in the trabecular hepatocellular carcinoma (immunoperoxidase, DAB counterstain, x250).



Fig. 2 - In the rhabdomyosarcomatous areas the tumor cells are positive for striated muscle actin (immunoperoxidase, DAB counterstain, x400).

experienced a liver recurrence and she died after 2 months for systemic disease.

Discussion and conclusion

Hepatic carcinosarcoma is a very rare tumor, with a significantly poorer prognosis respect to hepatocellular and cholangiocellular carcinomas. Commonly, this tumor develops on HBV-positive or virus-negative male

patients from Eastern countries. Sarcomatous elements could present a great variety of forms: only in other 5 cases a rhabdomyosarcomatous differentiation was previously reported (2, 8).

Our case presents several peculiarities, i.e. the female gender, the HCV-positive cirrhotic status and the European origin of the patient. However, the outcome of our case confirms that this neoplasm pursues a highly aggressive course with poor prognosis.

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