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HEPATOCELLULAR CARCINOMA IN A PREVIOUSLY HEALTHY PATIENT - CASE REPORT

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All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0). **Abstract:** Hepatocellular carcinoma (HCC) is the most common type of primary liver cancer, in most cases associated with cirrhosis and hepatitis B and C. The present report discusses a case of HCC in a previously healthy patient with no previous hepatic lesions.

Keywords: Hepatocarcinoma, hepatocellular carcinoma, liver cancer, hepatocarcinoma approach.

INTRODUCTION

Hepatocellular carcinoma is the most common type of primary liver cancer. It is a solid lesion strongly related to cirrhosis, especially those associated with hepatitis B and C infection. It is estimated that only between 7 and 12% of HCC cases develop in non-cirrhotic livers.

The case reported is a 65-year-old patient without previous comorbidities, with pain in the D hypochondrium and an image strongly suggestive of hepatocellular carcinoma. The patient underwent extended left hepatectomy without complications.

CASE REPORT

А 65-year-old patient with an initial presentation of pain in the right hypochondrium. Referred to the general surgery/oncology clinic outpatient after propedeutics with signs suggestive of hepatocellular carcinoma. He denied comorbidities. Ex-drinker, with interruption of addiction 15 years ago, Ex-smoker 20 years ago. Preserved liver function, no history of previous liver disease. Alpha-fetoprotein levels were within the normal range. Serologies for hepatitis B and C were negative.

Magnetic resonance imaging identified a large expansive neoplastic formation centered on segment IV, determining bulging of the hepatic contour at the level of the hilum, measuring 8.5 x7.5 x 8.3 cm. Such lesion presenting predominant hypersignal on T2,

some foci of hypersignal on T1 and suggesting hematic content; it shows restriction to the free movement of water molecules, predominantly arterial enhancement, peripheral with wash-out and pseudocapsule formation, besides center contour with areas of necrosis/liquefaction. Formation exerting a compressive effect on the gallbladder and the second duodenal portion, without signs of invasion. The report of the exam suggested hepatocellular carcinoma as first hypothesis. The presence of gallstones in the gallbladder was identified.

Chest tomography showing small oval pericallisural nodules suggestive of intrapulmonary lymph nodes. At the first visit, the patient had undergone colonoscopy, identified which rectal polyp, with anatomopathology compatible with tubulovillous adenoma with low-grade dysplasia. Upper digestive endoscopy showed signs of mild enanthematous pangastritis and bulging of the bulb due to extrinsic compression. Anatomopathology was suggestive of mild nonspecific conical pangastritis.

Patient underwent extended hepatectomy on 11/21/2017 (figures 1 and 2).

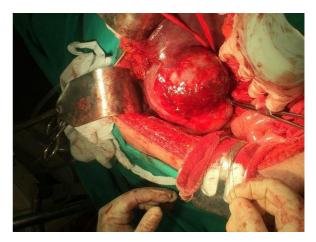


Figure 1: Identification of the hepatic nodule intraoperatively Source: Elaborated by the author. Santa Casa, 2017

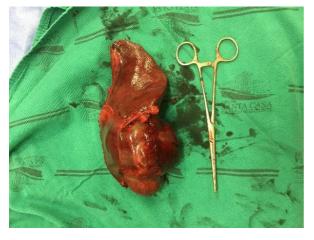


Figure 2: Surgical specimen - lobe hepatic segment V Source: Elaborated by the author. Santa Casa, 2017

DISCUSSION

Hepatocellular carcinoma is the most common primary malignant tumor of the liver, accounting for 85% of primary cancers in this organ. According to Carrilho FJ, Mattos AA (2015), HCC is the sixth most common type of cancer and the third leading cause of cancer death worldwide.

It is closely related to cirrhosis, especially those associated with hepatitis B and C. Other risk factors include exposure to aflatoxins present in food, alcohol abuse, diabetes, obesity, non-alcoholic liver disease and hemochromatosis.

In this context, the increase in nonalcoholic fatty liver disease (NAFLD), metabolic syndrome and obesity tend to become the main causes of hepatocarcinoma in Western countries.

It is estimated that between 7 and 12% of HCC cases develop in patients with noncirrhotic liver.

Clinical symptoms usually include pain in the right hypochondrium, weight loss and a palpable mass. Advanced Mayan stages may present with non-specific symptoms related to malignancy such as anorexia, nausea, severe weight loss with no apparent cause. Liver decompensation in patients diagnosed with early-stage cirrhosis or even in non-cirrhotic patients may also be present.

The initial diagnostic investigation can be performed through imaging tests such as ultrasound, computed tomography (CT) and magnetic resonance imaging (MRI). Ultrasound plays an important role in screening and early detection of HCC. However, the definitive diagnosis, in general, requires more advanced tests such as CT and MRI. Alpha-fetoprotein (AFP) measurements are also diagnostic tools.

On CT or MRI, HCC typically presents with hypervascularization of the nodule in the arterial phase and wash-out in the vascular or late phase. According to recommendations from the Brazilian Society of Hepatology, nodules with typical findings on imaging tests can be considered HCC, without complementation with biopsy. Non-typical imaging nodules require a second imaging test different from the first or biopsy.

Elevated alpha-fetoprotein levels support the diagnosis of HCC. Previous studies have observed an AFP level greater than 20ng/mL in about 75% of confirmed HCC cases.

The definition of treatment encompasses several aspects such as the presence of cirrhosis, Child-Pugh classification, lesion size, among others.

In non-cirrhotic patients, liver resection is the main treatment for HCC, with 5-year survival rates ranging from 50-70% after resection.

For cirrhotic patients, the best treatment is liver transplantation, which cures the tumor and cirrhosis. However, not all patients fit this treatment modality. Suitable candidates for this treatment modality are those with early stages of the disease, with a single nodule up to 2 cm in diameter or those who meet the Milan criteria – single tumor up to 5 cm in diameter or up to 3 tumors up to 3 cm in diameter. However, it is necessary to consider the limitations in relation to liver transplantation in terms of available donors and organs.

Other forms of treatment include ablative techniques and chemoembolization, applied in selected cases that do not fit the aforementioned criteria and with lower cure rates. Chemotherapy and radiation therapy play limited roles in HCC therapy, with occasional responses.

CONCLUSION

HCC is a relatively common cancer in the cirrhotic population, especially associated with hepatitis B and C, with limited treatment in some cases and which must comply with criteria for defining the best therapeutic proposal. Non-cirrhotic patients with HCC, although much less frequent than cirrhotic patients, have good treatment possibilities and considerable five-year survival rates.

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