

Atypical presentation of synchronous neoplasms

Presentación atípica de neoplasias sincrónicas

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https://doi.org/10.53903/01212095.216

Key words (MeSH)
Carcinoma, hepatocellular
Adenocarcinoma
Neoplasms, multiple primary

Palabras clave (DeCS)
Carcinoma hepatocelular
Adenocarcinoma
Neoplasias primarias múltiples

Summary

The aim of this article is the synchronous presentation of two types of tumor strains: hepatocellular carcinoma (HCC) and gastric adenocarcinoma. This association is infrequent, yet it is important to differentiate these metastatic lesions because it will modify the treatment of the patient. HCC is the most common primary liver neoplasm. Liver cirrhosis of any etiology is considered the main risk factor for the development of HCC. However, HCC in non-cirrhotic livers remains a rare finding. Of the gastric cancers, gastric adenocarcinoma is the most common histological type, and risk factors such as *Helicobacter pylori* infection contribute to its development. Below is a description of a 71-year-old male patient with a history of underlying liver disease who was admitted due to nausea, vomiting, weight loss, and dysphagia.

Resumen

El objetivo de este artículo es la presentación sincrónica de dos tipos de estirpes tumorales: el carcinoma hepatocelular (CHC) y el adenocarcinoma gástrico. Esta asociación es infrecuente, pero de importante diferenciación de las lesiones metastásicas, debido a que modificará el tratamiento del paciente. El CHC es la neoplasia primaria de hígado más frecuente. La cirrosis hepática de cualquier etiología se considera el principal factor de riesgo para el desarrollo de CHC. Sin embargo, el CHC en hígados no cirróticos sigue siendo un hallazgo poco común. De los cánceres gástricos, el adenocarcinoma es el tipo histológico más común. Factores de riesgo como la infección por *Helicobacter pylori* contribuyen al desarrollo del mismo. A continuación, se hace la descripción de un paciente masculino de 71 años de edad, con antecedentes de patología hepática subyacente, que ingresa por náuseas, vómito, pérdida de peso y disfagia.

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Case report

We present the case of a 71-year-old male patient who consults for a 15-day history of oral intolerance, nausea and vomiting, progressive dysphagia of solids and liquids, associated with weight loss of one month of development. As history she manifested consumption of enol. In view of the suspicion of underlying organic pathology, a computed axial tomography (CT) with intravenous contrast medium of the abdomen and pelvis was performed. The images showed a solid lesion affecting hepatic segments V and VI, with heterogeneous enhancement in the arterial phase and washout in the venous phase. Images of the digestive tract show thickening of the gastric wall in the pyloric antrum, with marked gastric dilatation. Upper gastrointestinal videoendoscopy was performed with biopsy of the gastrointestinal mucosa and fine needle puncture, fine needle biopsy of the liver.

Discussion

The results of the pathological anatomy concluded that the hepatic lesion is a grade II hepatocellular carcinoma (HCC) (Figures 1 and 2), and that the images of the pyloric canal mucosa are compatible with moderately differentiated, infiltrating gastric adenocarcinoma (Figure 3).

Multiple primary malignant tumors can be synchronous or metachronous depending on the interval between their diagnosis. A synchronous neoplasm is defined as one detected at the same time as the known cancer, or up to six months after its diagnosis, demonstrating a different histology (1).

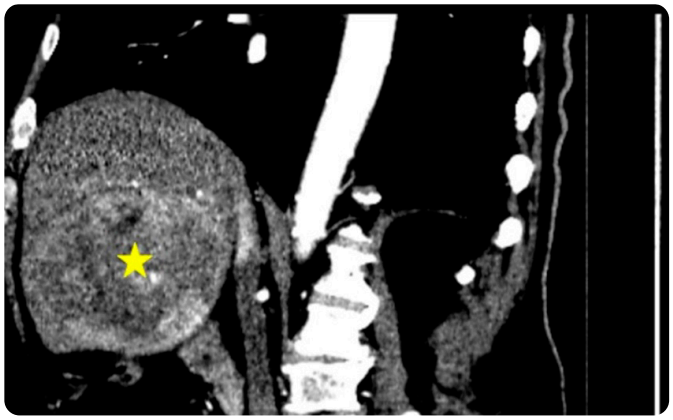


Figure 1. CT with coronal reconstruction of the abdomen with intravenous contrast medium, arterial phase. In the right hepatic lobe there is a voluminous lesion of rounded shape (yellow star), mainly affecting segments V and VI, of heterogeneous aspect, measuring 141 × 120 mm.

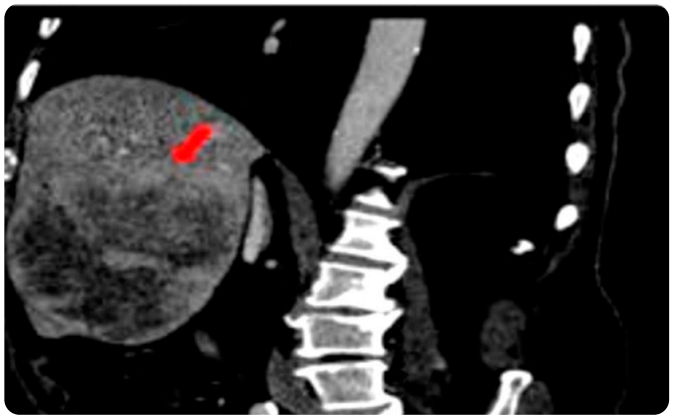


Figure 2. CT with coronal reconstruction of the abdomen with intravenous contrast medium. Hypervascular mass with heterogeneous enhancement, delimited by a pseudocapsule (red arrow) during the late phase.

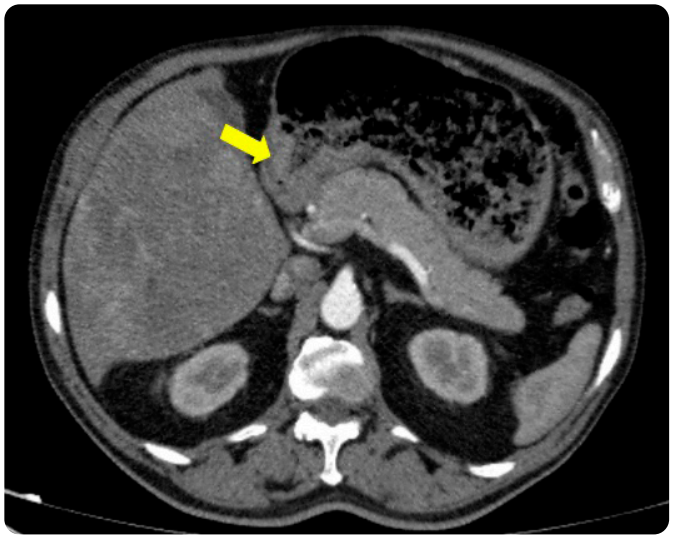


Figure 3. CT with axial reconstruction of the abdomen with intravenous contrast medium, arterial phase. Focal thickening with predominance of the anthropyloric region (yellow arrow).

The synchronous occurrence of primary gastric cancer and HCC is a very rare condition; the underlying pathophysiology of multiple primary malignancies is unknown. However, there are suggested hypotheses, such as common carcinogens, genetic susceptibility, and family history of malignancy (2). The incidence of gastric cancer with a second synchronous primary cancer varies from 2.0 to 10.9 % (3). HCC accounts for about 90 % of all primary liver cancers, develops in cirrhotic liver in 80 % of cases and occurs in 20 % of patients with non-cirrhotic chronic liver disease; it can also develop in patients without evidence of chronic liver disease.

The main differential diagnoses to be considered are metastases, primary gastric cancer and primary HCC, as well as hepatoid adenocarcnoma of the stomach, with an incidence of 1.3-15 % of all gastric carcinomas. It is a subtype of gastric tumors with an extremely poor prognosis, characterized by hepatoid features (2).

In diagnosis, imaging studies (CT or magnetic resonance imaging [MRI]) should be multiphasic, analyzing four phases: without contrast medium and then with IV contrast injection, arterial, portal venous and equilibrium phase. The characteristic findings of HCC are early enhancement in the arterial phase with wash-out and enhancement of a peripheral capsule during the portal/late venous phase (Figures 1 and 2). Regarding gastric adenocarcinoma, although the diagnostic methodology is upper endoscopy, CT is the modality of choice for staging the disease by identifying the primary tumor and assessing local, nodal and distant extension.

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Received for evaluation: January 15, 2023
Accepted for publication: May 26, 2023