

Hepatic tuberculosis mimicking cholangiocarcinoma

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A 23-year-old black man was admitted to our hospital for a four-month history of weight loss, malaise and high grade fever. At the admission the physical examination of the patient revealed a mild spleen enlargement, low BMI and low grade fever. His medical history was unremarkable, and he denied the use of illicit drugs. Laboratory data showed anemia (hemoglobin 8.6 g/dl, normal values 13–17) and leukocytosis (13.8/mm³, normal values 4.000–11.000). An empirical antibiotic therapy with piperacillin-tazobactam was started, and the fever subsided. A computed tomography (CT) of the chest was unremarkable. An abdomen CT with administration of intravenous contrast material revealed an inhomogeneous hepatic hilum, enlarged biliary ducts, and a ipodense mass with a size of 3 × 4 cm between I° and VII° hepatic segment, with a likely infiltration of the duodenum (Fig. 1).

A subsequent control CT showed smaller peritoneal nodules, suggestive of metastases. In the suspect of cholangiocarcinoma an ultrasonography-guided biopsy of the hepatic focal lesion was performed. The histological examination of the specimen showed features compatible with granuloma and no signs of neoplasm. This, along with the subsequent positivity of an Interferon gamma release assay, raised also the suspicion of tuberculosis. A biopsy of the duodenal infiltrated area was ordered. The histological examination revealed again features of granulomas (Fig. 2).

However the bioptic specimen tested negative for acid-fast bacilli on smear, and the polymerase chain reaction (PCR) for Mycobacterium tuberculosis was also negative. An explorative laparoscopy was therefore planned. However, shortly before the procedure, a culture on the same bioptic sample proved to be positive for Mycobacterium tuberculosis complex. Therapy with isoniazid, ethambutol and levofloxacin was started, and the hepatic and peritoneal nodules, as well as the conditions

of the patient, progressively improved. Isolated hepatic localization of the tuberculosis is very rare, and is usually asymptomatic [1]. This case was particularly challenging for the tumor-like features of the disease at the imaging [2], and for the negativity of the PCR on the bioptic sample. In this regard the clinicians should be aware that the sensitivity and the negative predictive value of the PCR for tuberculosis on extra-pulmonary specimens with negative smear are only about 83% and 80% respectively [3].

Ethical approval

This case report has obtained approval from the head of the Internal Medicine unit at the Department of Internal Medicine of the Azienda Ospedaliera di Cosenza (Italy).

Informed consent

Patient consent was not obtained as no patient identifiers were used.

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CRediT authorship contribution statement

Bova C: Conception and design of study, drafting the manuscript. De Stefano R, Pignataro FS, Ruvio M: Conception and design of study, review of the manuscript for important intellectual content.

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(e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

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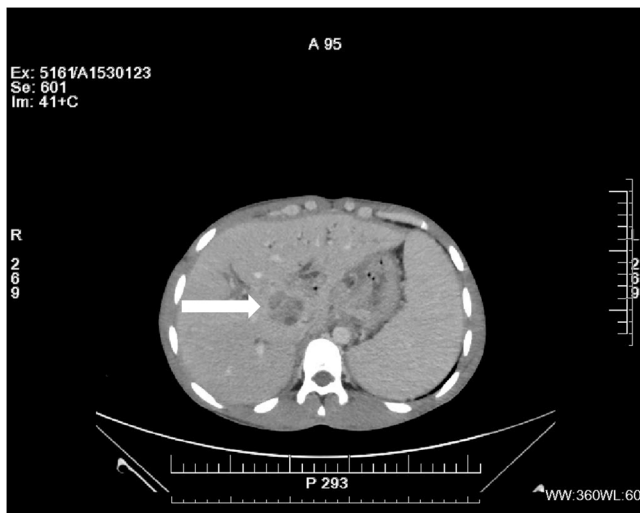


Fig. 1. Ipodense hepatic focal lesion in the I° segment, measuring 4 × 3 cm (white arrow).

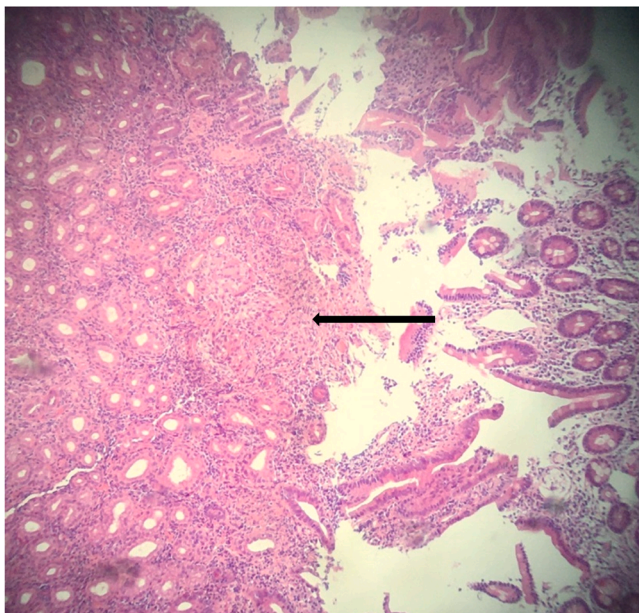


Fig. 2. Histological examination of duodenal biopsy. Granuloma with epithelioid cells (black arrow). Hematoxylin-eosin stain x 200.

Declaration of Competing Interest

Each author declares that he or she has no commercial associations