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Malignant Peritoneal Mesothelioma

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A 74-year-old patient presented at our hospital with a 3-month history of abdominal distention that gradually worsened. The patient's abdomen was significantly distended, and a computed tomographic scan revealed extensive ascites and a large number of nodular shadows (Fig. 1). Some peritonitis carcinomatosa or tuberculous peritonitis was suspected, but could not be diagnosed from common tumor markers or cytologic sampling of ascites. Exploratory laparoscopy revealed numerous nodules on the peritoneum and omentum (Fig. 2). As a result of a histopathological analysis of biopsy samples, a diagnosis of the epithelioid type of malignant peritoneal mesothelioma (MPM) was made. The patient was referred to a university hospital where nivolumab plus ipilimumab treatment was initiated because of a moderate amount of bilateral pleural effusions.

MPM is a rare malignancy of the peritoneum and has a poor prognosis.[1] In comparison to pleural mesothelioma, the link with asbestos exposure is weaker.[1] Since symptoms, imaging findings, and serum markers are nonspecific, the diagnosis of MPM is confirmed by pathologic evaluation.[1] MPM is divided into three histologic subtypes: epithelioid, sarcomatoid, and biphasic.[2] MPM is usually refractory to standard systemic chemotherapies, the gold standard of treatment for patients with MPM without extraperitoneal spread remains cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (CRS-HIPEC).[2] Ongoing molecular therapy and immunotherapy trials will offer a possible new treatment.[1] BAP1 mutations are associated with improved survival and may serve as predictive biomarkers for immunotherapy.[3] ALK-rearrangements in a small number of patients could often benefit from ALK inhibitor treatment.[4]

CONFLICT OF INTEREST STATEMENT

None declared.

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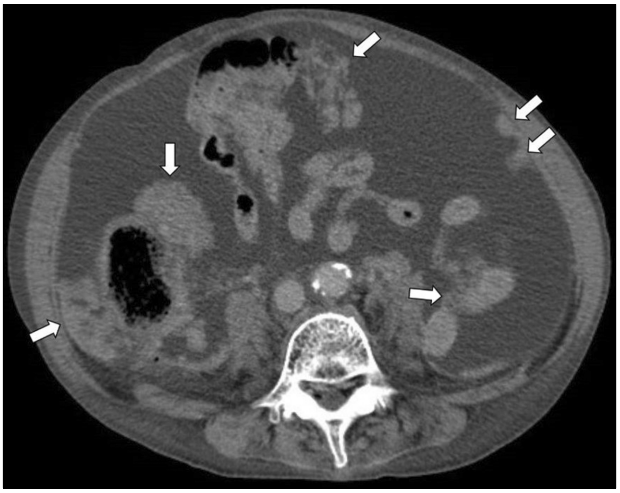

FIG. 1. Abdominal computed tomography shows massive ascites and a large number of nodular shadows (arrows).

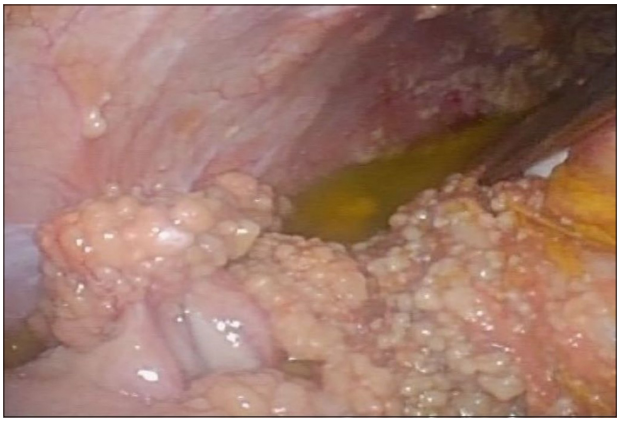

FIG. 2. Exploratory laparoscopy shows numerous miliary nodules mainly in the omentum and mesentery.

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