Hepatic angiosarcoma: a transdisciplinary case study

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Hepatic Angiosarcoma is a rare malignancy of endothelial cell origin that is generally idiopathic and presents non-specific clinical manifestations. Hemoperitoneum can occur in 17-27% of cases and is a result of tumor rupture, which has a devastating prognosis. We present a 79-year-old female patient with history of diffuse right upper quadrant abdominal pain associated with syncope episodes and unintentional weight loss. Physical examination was unremarkable except for painful palpation of the right upper quadrant. Laboratory exams indicated chronic disease anemia, a 2.7 INR, decreased albumin, increased C-Reactive Protein and GGT, and normal AST, ALT, Alkaline Phosphatase and Bilirubin. Viral hepatitis serologies were negative. Abdominal ultrasonography revealed hepatomegaly and solid liver lesions of heterogeneous echogenicity and imprecise limits. Three-phase abdominal CT showed multiple liver masses of heterogeneous pattern of enhancement suggestive of atypical hemangioma associated with ascites. Chest CT revealed bilateral pulmonary nodules suggestive of metastasis. During hospital stay, the patient developed a massive hemoperitoneum that required emergency laparotomy. In this circumstance, liver and omentum biopsies were performed and the pathology reports ultimately indicated the possibility of hepatic angiosarcoma. The patient developed refractory hemoperitoneum and hemorrhagic shock and ultimately passed away, 48 days after hospital admission. Definitive diagnosis was only available posteriorly, with immunohistochemistry positivity for ERG, CD34 and Factor VIII-related antigen on both omentum and lung samples. This case study provides valuable clinical discussion and emphasizes how a transdisciplinary approach is essential to correctly diagnose and manage such complex cases.

Key words: Hemangiosarcoma; Hemoperitoneum; Liver neoplasms.