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Case report

PERITONEUM EPITHELIOID TUMOR A MA LIGNANT MESOTHELIOMA: CASE REPORT AND LITERATURE REVIEW

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Abstract
Mesotheliomas are neoplasms that arise from mesothelial cells in the serous cavities. The exposure to asbestos is of great importance in its development and the incidence of this tumor has significantly increased. Its latency period between exposure to asbestos and the onset of the disease is 15 to 60 years and has an unfavorable prognosis due to its high malignancy, with a mean survival of 4 to 12 months of life after the diagnosis.Most patients affected are around 60 years, with a peak of incidence from 80 to 84 year in men and 75 to 79 of years in women, being males the most prevalent. It is an incurable neoplasm and its treatment aims to improve the quality of life and increase the patient survival.

Keywords: Mesotheliomas; Mesothelial; Peritoneal; Asbestos

Introduction
Mesotheliomas are rare and aggressive neoplasms that arise from the lining cells of mesothelial [1], surfaces of serous cavities such as the pleura [2], peritoneum, tunica vaginalis and pericardium [2,3], the vast majority of which are of pleural origin [4], corresponding to 7-30% of the cases of malignant mesotheliomas [5].

The first case reported was in 1908 by Miller and Winn [6], whose case described a 32-year-old man who had abdominal pain, ascites and an extensive peritoneal neoplastic spread that was not surgically resectable. His treatment was based on symptoms and after one year he died [6].

Malignant pleural mesothelioma presents as the main risk factor exposure to asbestos fibers that promote changes in the DNA of cells, leading to alterations in the cell cycle and their massive proliferation [7,8]. Malignant peritoneal mesothelioma, on the other hand, despite having a relationship between exposure to asbestos fibers and tumor development, does not have fully clarified risk factors [4].

Clinically, both pleural and peritoneal mesothelioma present vague and nonspecific symptoms that vary according to the degree of extension and involvement of the tumor4 and can be easily confused with other diseases of pleural, pulmonary, and peritoneal origin, which makes its suspicion and diagnosis difficult [8].

It has a very unfavorable prognosis, with an average survival of 4-12 months after diagnosis. Treatment consists of palliative measures based on analgesia, chemotherapy, radiotherapy, and tumor resection surgery [5,8].

CASE REPORT
A 59-year-old male patient presented 1 month of progressive increase in abdominal volume accompanied by heartburn, regurgitation, asthenia and loss of 11 kg (15% body weight).

Patient with systemic arterial hypertension without adequate treatment, smoker 20 cigarettes / day and alcohol use (approximately 20g / day).

Appendectomized in childhood, without previous abdominal surgeries. There is no history of exposure to asbestos or radiation.

At the initial physical examination, he was in good general condition, stained and hydrated mucous membranes, anicteric, with no stigmata of chronic liver disease, no enlarged lymph nodes volume in territories accessible to palpation. presence of ascites moderate without visceromegaly or palpable tumors.

Initial laboratory tests were normal, including tumor markers (CEA, CA19.9, alpha-fetoprotein, PSA, FANP).

Paracentesis was performed for diagnostic elucidation with the presence

of clear citrus fluid; protein: 4.8g/dl, albumin: 2.9g/dl, ADA: 37, glucose: 59, LDH: 274, amylase: 29; cell phone with predominance of lymphocytes, some mesothelial, many with hyperchromatic nucleus with negative bacteriological examination and positive neoplastic cell test.

Performed tomography of the total abdomen multiple lesions modular in the abdominal cavity, without association with massive organ damage. Colonoscopy and upper digestive endoscopy were normal.

We chose to perform diagnostic videolaparoscopy with multiple biopsies of the peritoneum, where the anatomopathological examination showed that it was a malignant epithelioid mesothelioma with a solid papillary pattern.

DISCUSSION

Mesothelioma is a neoplasm of the mesothelium, a tissue of mesodermal origin. It preferentially grows on serous surfaces and most frequently affects the pleura in 81% of cases, the peritoneum in 15%, and the pericardium in 4% [9]. Simultaneous pleural and peritoneal involvement occurs in 30-45% of cases, whereas disease confined to the peritoneum is limited to 10-20% of patients with mesothelioma [3].

Although the main risk factor is exposure to asbestos fibers in pleural mesothelioma (occupational factor) [10], the etiopathology of peritoneal disease is not as well established [3]. However, there are reports of previous exposure to radiation, beryllium, chronic peritonitis, and oncogenic viruses related to the development of this disease [7,8].

Malignant peritoneal mesothelioma most frequently affects males [11], between 50 and 60 years of age. Despite the ban on the use of asbestos [12], in some countries, the growth trend is expected to continue in the coming decades due to the increase in diagnosis and the long latency period between exposure and the first symptoms of the disease [9].

The symptoms of malignant peritoneal mesothelioma may not appear for 20 to 50 years after an individual inhales or ingests asbestos fibers. The most common symptom of the MPM is abdominal distention, and the second is nonspecific and diffuse abdominal pain. Other symptoms such as anorexia, weight loss, nausea and fever of unknown origin may also be present [3].

The patient can present with an acute obstructive or perforation abdomen in rare cases and after, some dissemination through the abdominal cavity, if the clinical signs and symptoms last for a long period. In addition to physical signs, psychological and social symptoms may also occur as anxiety (67%), depression (52%), fear (51%) and isolation (41%) since the symptomatology of the disease is progressive, severe and reducing the functional capacity [8].

Diagnosis is often late [5] since the disease can develop indolently. Abdominal computed tomography is the most useful exam for evaluating the case [13]. In our case, the patient presented multiple modular lesions in the abdominal cavity, without association with massive organ damage.

In addition to tomography, it is necessary to perform a biopsy performed by laparoscopy or laparotomy. From a histopathological point of view, peritoneal mesothelioma has 3 histological types [14]: epithelioid, which corresponds to 60% of cases, sarcomatous, which corresponds to 10% of cases, and mixed or biphasic type, which corresponds to 30% of cases [8]. Epithelioid peritoneal mesothelioma is the most common histological type and usually has the best prognosis [15].

In our patient we choose to perform diagnostic videolaparoscopy with multiple peritoneum biopsies that showed malignant epithelioid mesothelioma with a solid papillary pattern.

Due to its rarity there are still no randomized case-control studies to guide the best treatment strategy [5]. Its possible to find in literature retrospective studies of independent institutions and their respective experiences with this diseases, but there are no homogeneity in treatment. However, other studies reveal that the current treatment most used for malignant peritoneal mesothelioma is based on surgical therapy, chemotherapy and molecular therapy, the latter with studies still in development [5].

The surgical therapy is used as first line on treatment of peritoneal mesothelioma and is characterized by cytoreductive surgery (CRS), consisting of physical excision of macroscopic lesions and infusion of hyperthermic intraperitoneal chemotherapy (HIPEC), consisting of washing the peritoneal cavity [3]. Cisplatin or Carboplatin are used as chemotherapeutics, the second being more tolerated in patients in palliative care and the elderly [7].

Variables are still being studied to define a better prognosis and so far they associate that the epithelioid histological type has a worse prognosis in patients with peritoneal mesothelioma [15].

In a retrospective study of 35 patients diagnosed with peritoneal mesothelioma, the gender, use of chemotherapy, time of exposure to asbestos and age were defined as important prognostic factor, with patients older than 60 years having a mean survival of 10, 3 months, while patients younger than or equal to 60 years have a mean survival of 19.6 months [15].

Our case report has as main attribution to show that valuing the patient's symptoms is of great importance in the early diagnosis of this disease. Although malignant peritoneal mesothelioma does not have a cure, analgesia, chemotherapy, immunotherapy and tumor resection surgery are considerable therapeutic options that aim to promote better quality of life and survival in these patients.

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