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Case Report

Malignant peritoneal mesothelioma: Two cases and literature review

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Malignant peritoneal mesothelioma (MPM) is a rare aggressive tumor arising from the mesothelial lining of the peritoneum. Only 20 to 30% of all mesotheliomas arise from the peritoneum itself. In the present paper, 2 cases of MPM were discussed, in light of the literature review. One of the cases is a 73 years old male admitted with complaints of abdominal swelling and ascites. Peritoneal biopsy was reported as epitheloid malignant mesothelioma. Further radiologic examination revealed that it was primarily of peritoneal origin. He was evaluated as inoperable. After the completion of systemic chemo, he is still on follow-up with stable disease on 10th month of diagnosis. The second case is a 51 years old female with a familial history of mesothelioma with the complaints of abdominal pain and weight loss. Because of the diffuse peritoneal carcinomatosis, she was diagnosed as inoperable peritoneal mesothelioma and after the start of chemotherapy she got clinically worse and died. MPM is a highly lethal neoplasm and given the rarity, it is difficult to obtain precise information regarding incidence, history and optimal management. Treatment approaches have traditionally been largely unsuccessful in this disease, but newer techniques are promising.

Key words: Peritoneal, mesothelioma, treatment.

INTRODUCTİON

Malignant peritoneal mesothelioma (MPM) is a rare aggressive tumor arising from the mesothelial lining of the peritoneum. The natural history of peritoneal mesothelioma is that of rapid progression with fatal outcome without treatment. Only 20 to 30% of all mesotheliomas arise from the peritoneum itself (Bijelic et al., 2012). The clinical and radiologic presentation is nonspecific. In the present paper, 2 cases of MPM Were discussed in light of the literature review.

CASE REPORTS

Case 1

A 73 years old male, with a history of asbestos exposure, presented with abdominal swelling. Abdominal tomography revealed massive ascites diffuse peritoneal thickenings and a subcutaneous nodular lesion on left thoracal area. Upper and lower gastrointestinal endoscopic examinations were normal. Peritoneal biopsy pathology was reported as epitheloid malignant mesothelioma staining positively with calretinin, mesothelin and CK-7. Further radiologic examination revealed that it was primarily of peritoneal origin. Since whole omental and peritoneal surfaces were invaded, the case was reported as inoperable and systemic chemotherapy consisting of cisplatin and pemetrexed combination was started. After 3 courses, partial response was detected and six courses of chemotherapy were completed. At the 10th month of diagnosis, he is still on follow-up with stable disease.

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Case 2

A 51 years old female, having a family history of mesothelioma in her father, admitted with the complaints of abdominal pain and weight loss. Since radiologic imaging techniques did not reveal significant findings, laparascopic examination was performed. Diffuse peritoneal carcinomatosis was detected, the case was inoperable and biopsies were taken during the procedure. The pathologic examination revealed a biphasic type of malignant mesothelioma staining positively for calretinin and pan-CK. After additional procedures, the case was evaluated as primary peritoneal mesothelioma. Systemic chemotherapy consisting of cisplatin and pemetrexed was started. After the third chemotherapy, on the fourth month of diagnosis, the patients clinic became worse and she died.

DISCUSSION

MPM is a highly lethal neoplasm and given the rarity, it is difficult to obtain precise information regarding incidence, history and optimal management. Despite the similarities between pleural and peritoneal mesotheliomas, clinical and prognostic features and precise nature of MPM may be different (Taşkın et al., 2012). There is a strong relationship between asbestos exposure and the development of mesothelioma at any location. The lifetime risk of developing mesothelioma among asbestos workers is thought to be as high as 10%, and the latency period between exposure and the development of mesothelioma is approximately 30 years. Although, asbestos exposure is the predominantly defined risk factor, there are also case reports of MPM arising in irradiated fields; Exposure to other mineral fibers (e.g. erionite, a silicate fiber of the zeolite family) is reported to be a risk factor for peritoneal as well as pleural mesothelioma (Baris et al., 1987). There are no signs or symptoms that are specific for MPM. Although most cases are symptomatic, a few are diagnosed incidentally, after inquiry into an unrelated process, such as infertility, or recognized during a routine physical examination. Diffuse MPM is highly aggressive, in contrast, patients with a localized MPM usually have a good prognosis following complete surgical excision.

Treatment approaches have traditionally been largely unsuccessful in this disease and consisted of systemic chemotherapy with surgery for palliation of symptoms. The median survival ranged from 9 to 14 months with these strategies (Antman et al., 1988; Sridhar et al., 1992). Alternative treatment strategies with cytoreductive surgery with heated intraoperative intraperitoneal chemotherapy in selected cases, has been used in a number of centers showing median survivals of 36 to 92 months (Brigand et al., 2006).

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