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Short Communication
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Leptomeningeal Carcinomatosis from Prostate Cancer

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Introduction

Leptomeningeal metastasis (LM) can complicate any malignant tumor. It can be seen mainly in patients with breast, lung cancer, and malignant melanoma. However, LM from prostate cancer is extremely rare [1]. The clinical presentation of LM is variable since all the levels of the neuro-axis may be affected. Meningeal symptoms include signs of intracranial hypertension like headache, vomiting bu also seizures, sensory abnormalities, memory problems as well asincontinence, asthenia, pain and confusion. Cranial nerve are commonly affected espacially the III, V, VI, VII and the VIII cranial nerves [1]. The gold standard for diagnosis relies on the presence of malignant cells in the cerebrospinal fluid. However, this complication may be highly suspected in the case of hypoglycorrhachia, lymphocytic pleocytosis, and elevated opening pressure. Meningeal enhancement in the MRI may also be very suggestive of the leptomeningeal metastasis [2].

Cranial radiotherapy is often not used to treat LM due to significant toxicity. Conventional chemotherapy and hormonetherapy agents have limited delivery into central nervous system in therapeutic concentrations. Intrathecal chemotherapy has served as a means to circumvent the blood brain barrier in LM. Four agents are currently approved by the United States FDA for direct injection into the intrathecal space: methotrexate, cytosine arabinoside, liposomal cytarabine arabinoside, and thiotepa [1]. Unfortunately, outcomes for cancer patients with LM remain poor: rates of response to therapy and overall survival have not been markedly improved since the therapeutic revolution seen in many cancer localizations [1,3,4].

In this short communication, we present clinical findings, treatment and prognosis of leptomeningeal carcinomatosis from 2 prostate cancer patients treated in the department of medical oncology at Hassan II University hospital, Fez, Morocco. The ages of patients were 56 and 70. Thetime between the diagnosis of the primary tumor and the occurence of the leptomeningeal carcinomatosiswere 18 and 27 months. Both patients were castration resistant. PSA levels were high in both cases. The findings of brain computed tomography were contrast enhancement in the cerebral sulci and basal cisterns in one case and normal scan in the other case. The two patients had cytologic evidence of meningeal metastasis in the spinal fluid examination. Intrathecal methotrexate10mg twice weekly was received in both cases. Treatment of systemic cancer relying on docetaxel based chemotherapy was associated. The overall survivals were 6 and 8 months.

In conclusion, the LM is a rare, late and devasting complication of hormone refractory prostate cancer. More and more patients are expected to be diagnosed with this complication since more effective treatments are administered and the life expectancy of patients is prolonged. Treatment is very challenging and should be individualized, based on each case's clinical presentation.

Referances

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