

Spinal Solitary Plasmacytoma Recurrent At Symphysis Pubis

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Abstract

Original Research Article

Solitary plasmacytoma is a rare entity. It can be bone or extra bone. The treatment of bone plasmacytoma is essentially based on radiotherapy, which allows local control in the majority of cases. However, progression to multiple myeloma, recurrence or extension to other sites is possible. We report a rare case of pubis symphysis plasmacytoma discovered after 7 years of follow-up of a vertebral solitary plasmacytoma.

Keywords: Plasmacytoma, vertebral, recurrence, pubis.

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INTRODUCTION

Solitary plasmacytoma is defined as a single plasmacytic tumor lesion without medullary invasion, it is different from multiple myeloma. It is a rare tumor [1]. Which groups two distinct entities related to tumor localization: bone or extra bone [2]. The solitary bone plasmacytoma is a radiosensitive and radio-curable tumor [3,4], however, medullary invasion or extension to other sites is possible. We report in this observation a

rare form of recurrence of a vertebral plasmacytoma in the pubis.

OBSERVATION

This is a 53-year-old patient with no specific history who was suffering from isolated mechanical back pain. The clinical examination found exquisite pain on the palpation of the thoracolumbar hinge, a non-deformed mobile spine without neurological deficit. MRI spinal showed a tumor process of T12 (Figure 1).



Fig-1: MRI section showing a tumor process at the level of the vertebral body of T12 extending inside the canal and strangling the medullary cone

The radiological assessment did not show suspicious bone lesions in the skull of the pelvis or femurs. The blood count was normal, there was no hypercalcemia or renal failure, the plasma cell count was 3.5% in the myelogram. The osteomedullary biopsy was without particularity.

Immunoelectrophoresis of serum proteins revealed monoclonal gammopathy with a low Kappa light chain rate. In front of this table a surgical resection of the tumor with laminectomy and osteosynthesis were indicated (figure 2).



Fig-2: Lateral radiographic of the thoracolumbar hinge after laminectomy and osteosynthesis.

The pathological study of the specimen was in favor of a plasmocytoma. Adjuvant treatment consisting of 10 sessions of localized radiotherapy T12-L2 (3 Gy per session) and 3 courses of monthly Zometa was instituted with regular follow-up in consultation for 6 years. The evolution was marked by local control of the

vertebral plasmocytoma and regression of the pain phenomena without disturbance of the biological balance. After the 6th year of evolution, there was a significant increase in Kappa light chains with a PET scan showing a plasmocytic localization on the right side of the pubic symphysis (Figure 3).

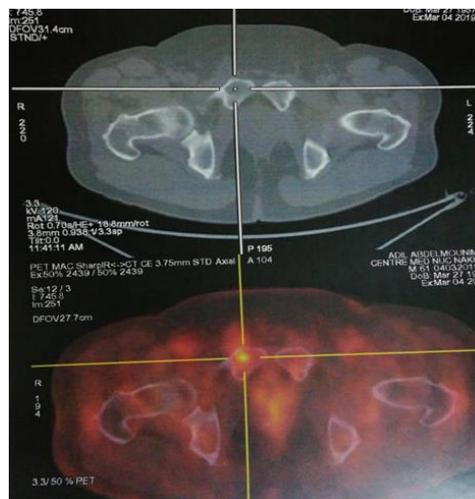


Fig-3 : PET- scan showing an active lytic focus evoking a solitary plasmocytoma of the right part of the pubic symphysis

DISCUSSION

The solitary bone plasmocytoma is a focal lesion composed of malignant plasma cells without medullary invasion, unlike multiple myeloma. It mainly affects the axial skeleton as it is the case in our patient.

Indeed our patient grouped the criteria necessary to bring the diagnosis of solitary plasmocytoma discovered to the anatomopathological study of the operative specimen: the absence of anemia, a normal phosphocalcic balance, a normal renal function, a normal spinal cytology and an absence other lesions on skeletal X-rays or MRI [5].

The treatment of solitary bone plasmocytoma is mainly based on radiotherapy (RT); these are radiosensitive and radio-curable tumors [3, 4]. In our case, localized T12-L2 radiotherapy at the rate of 3 Gy per session associated with Zometa allowed local control of the plasmocytoma without recurrence.

Surgical treatment is indicated for vertebral plasmocytoma requiring decompressive laminectomy and in the absence of prior histological evidence or for orthopedic repair in case of fracture or risk of fracture, thus allowing radiotherapy to be performed in better conditions [3].

The prognosis of solitary bone plasmocytoma is dominated by the evolution to the multiple myeloma. In the literature, progression to multiple myeloma usually occurs within two years of initial diagnosis. Our patient did not progress to multiple myeloma after 7 years of follow-up. but cases have been noted up to 15 years after diagnosis, which justifies long-term follow-up of patients [6-11].

The evolution towards the multifocality of the lesions is a rare and controversial situation, it has been described in 2 to 15% of the cases in the literature [12 - 14]. It concerns new bone localizations at a distance from the first one. This is the case of our patient who has presented a new pubis localization after 7 years of evolution of his vertebral plasmocytoma. However, the distinction with multiple myeloma is not always easy, especially since a simple marrow puncture does not formally exclude dissemination [15,16].

CONCLUSION

The solitary bone plasmocytoma is a rare tumor, radiotherapy allows healing in the majority of cases, however the progression to multiple myeloma or extension to other localization is possible. This justifies a long-term follow-up of these tumors.

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