Available online at www.scientiaresearchlibrary.com

Scientia Research Library

ISSN 2348-0416
USA CODEN: JASRHB

Journal of Applied Science And Research, 2016, 4 (2):84-88

(*http://www.scientiaresearchlibrary.com/arhcive.php*)

Extramedullarry nasal plasmocytoma: a case report

Mohamed MLIHA TOUATI *(1), Mehdi CHIHANI(1), Youssef DAROUASSI(1), Abdelfettah Al JALIL (1), Khalid TOURABI(2), Ismail Essadi (3), Brahim BOUAITY(1), Haddou AAMAR(1).

[1]ENT department, Military Hospital Avicenna, Marrakech, Morocco.
[2]Stomatology and maxillofacial surgery departement, Military Hospital Avicenna, Marrakech, Morocco
[3]Medical oncology department, Military Hospital Avicenna, Marrakech, Morocco

ABSTRACT

The solitary plasmacytoma of the nasal cavity is one of the locations of extra-medullary plasmacytoma in the upper aerodigestive tract. The symptoms are nonspecific. We report a case of solitary plasmacytoma of the left nasal cavity, in a 46 year old patient with a straight nasal deformity and ipsilateral rhinorrhea bloody, biopsy and histologic study were diagnosed plasmacytoma. The negativity of the clinical examination confirmed the extramedullary form a nasal endo location. Through this observation and review of the literature we will try to show the clinical, biological and radiological expression of these plasmocytomas endonasaux and therapeutic modalities and monitoring.

Keyword : extramedullary plasmacytoma, nasal cavity.

INTRODUCTION

The solitary plasmacytoma of sinonasal cavities is a rare but not exceptional malignancy. It is due to the proliferation of a plasma cell clone .the single malignant plasma cell proliferation may take several histological forms: one, extra-medullary (extra-medullary plasmacytoma: PEM), preferably reaching the sub mucosa of the upper aerodigestive tract, other, bone, sitting at the medulla (solitary bone plasmacytoma: PSO) [1]. The diagnosis of plasma cell both its forms can not be accepted by the isolated nature of the injury.

We report a case of extra-medullary plasmacytoma in nasal sinus level and review of the literature showing the need for local and general balance sheet for the nosology ranking and therapeutic modalities.

MATERIALS AND METHODS

CLINICAL CASE

A man received 46 years in the ENT department and Neck Surgery of the Military hospital of

Marrakech, for swelling in right orbital. He had no medical history apart from chronic smoking 35 packets encrypted year. The start went back to 8 months by a neglected progressive right nasal obstruction, rhinorrhea associated with bloody cacosmia. Physical examination on admission showed a bulging suborbital right with ipsilateral nasal deformity, swelling that is covered with an inflammatory skin, sensitive and adhering to deep farm plan. The anterior rhinoscopy showed a filling of the nasal cavity by a friable reddish fleshy tumor, covered mucopurulent secretions and bleeding on contact. The left nostril is free. The rest of the exam shows no oral pharyngolaryngeal reached or nasopharyngeal endoscopy. the scanner facial bones showed a tumor process occupying the right nasal cavity with bone loss of the jaw without orbital invasion (Figure 1). There are no associated lymph node involvement. The nasal biopsy concluded the diagnosis of malignant plasmacytoma of the nasal cavity. The balance of general expansion in search of other sites has been achieved:

• NFS, coagulation, serum electrolytes, renal and liver function are normal.

• VS: 30 mm in the first hour and C-reactive protein (PCR) normal.

• The serum protein electrophoresis is normal

• The Bence Jones proteinuria by electrophoresis of urinary protein of 24 hours is negative.

• The bone marrow examination was normal with no significant cytologic abnormality

• radiographs of the normal bony skeleton

• The calcium and phosphate is normal

The negativity of the balance sheet has allowed us to make the diagnosis of solitary PEM of the nasal cavity and remove multiple myeloma and PSO. The treatment included a surgical approach through Red- Denkers for tumor resection and radiation therapy on the tumor website (45 Gy). The evolution is marked by a good local control and the back is twenty months.

RESULT AND DISCUSSION

The endonasal plasmacytoma is a rare tumor (2 to4% plasmacytomas) representing 4% of non-epithelial cancers sinonasal [2]. On the other maps can even at the upper aerodigestive tract including the nasopharynx, maxillary sinus, amygdala, and sometimes the salivary glands. These locations remain the most common forms of extra bone. The EMP has a male predominance with a ratio of 3/1 and an average age of 60-70 years (less than 2% before age 40) [3,4] but two extreme cases have been reported in a 5 years and adults 80 years [5]. Willis in 1961 proposed a classification into three groups [6]: Group I: multiple myeloma with bone marrow involvement of long bones visible on radiographs with frequent laboratory abnormalities (Bence-Jones proteinuria, electrophoresis of pathological proteins). Group II: solitary bone plasmacytoma without metastasis. Group III: plasmocytoma primitive soft tissue, single or multiple. This classification helps to guide therapeutic management but the interrelationships between these groups are discussed by Helmus in 1964 leaving presupposing the evolution of metastatic medullary plasmacytoma extra [7]. The clinical expression is not suggestive of the diagnosis, usually it is a little algic unilateral nasal obstruction. Epistaxis, local pain, anterior and posterior rhinorrhea [3]. Headache, and exophthalmos are also described. The pain is often linked to a rare bone loss, however. The rhinoscopic examination usually shows mucosal swelling and / or in form of variable mucosa, sometimes polypoid likely to have a lytic changes faster [3,8]. It occupies the upper aerodigestive tract or oral cavity [9, 10]. The lymph node is possible. [11]

Histological examination performed after biopsy diagnostic plasmocytoma says. The differentiation between multiple myeloma and polyclonal plasma cell infiltration is sometimes difficult [8]. Differentiation between, on the one hand multiple myeloma and other forms extra spinal cord and bone solitary plasmacytoma, is based on:

- A standard X-ray examination in search of lytic lesions incomplete punch, common in the cranial vault and evocative plasmacytoma.

Computed tomography evaluates the lesion locoregional extension. MRI T2-weighted is sometimes useful for differentiating inflammation, retention and the tumor [12] and to assess a possible invasion of the dura. After treatment, the standard radiograph normalizes rarely in case of complete remission.

- A laboratory test CBC, complete blood electrolytes, renal and inflammatory balance report (ESR, CRP). Protein electrophoresis (ELP) serum looking for monoclonal gammopathy [8] and serum immunoglobulins weight filling looking for a peak. The search for a so-called proteinuria Bence Jones proteins by electrophoresis of urinary 24 hours. A case plasmacytoma endonasal was detected by immunoelectrophoresis secretions collected after washing nasal cavity by De Gast [13]. The diagnosis of isolated extramedullary plasmacytoma is established at the lack of bone marrow involvement, the normality of the ELP serum (or a peak monclonal regressing after treatment) and absence of Bence Jones protein. [8] The usual course of plasmocytoma endonasal is marked by metastatic spread in 21-75% of cases [14, 15]. Local recurrence and distance extension would be less frequent than for bone solitary plasmacytoma [12]. Treatment plasmacytomas extra medullary is based on surgery and / or radiotherapy [3, 8]. For the surgical treatment several first channels can be foreseen (Excision by endonasal or transfacial channel), depending on the tumor extension to the paranasal sinuses and adjacent structures (orbital and crâniocérébrale) .For our patient we have selected vestibular pathway Red Denkers. In case of difficult removal and / or incomplete, systematic radiation therapy should be discussed based on the patient's general condition. There is no superiority of surgery alone versus radiotherapy alone or radiosurgery Association. [7] In our patient we advocated surgery combined with external radiotherapy. Disseminated forms require different treatment based on chemotherapy in internal medicine [3] .The 5-year survival is around 50% with an average survival of variable depending on the type of plasmocytoma: extramedullary (108 , 8 months), solitary bone (86.4 months) and multiple myeloma (24 months). [8]

CONCLUSION

The solitary plasmacytoma of sinonasal cavities is a location of extramedullary plasmacytoma, Clinical and radiology are not specific. The diagnosis is essentially histological. Biology helps to appreciate the spinal dissemination to suggest the isolated or not the plasmacytoma. Treatment of extramedullary form endonasal based on either the first combination surgery followed by radiotherapy, either radiotherapy alone. The prognosis is related to changes by invading the bone marrow (multiple myeloma) that warrants monitoring, clinical, biological and radiological extended.

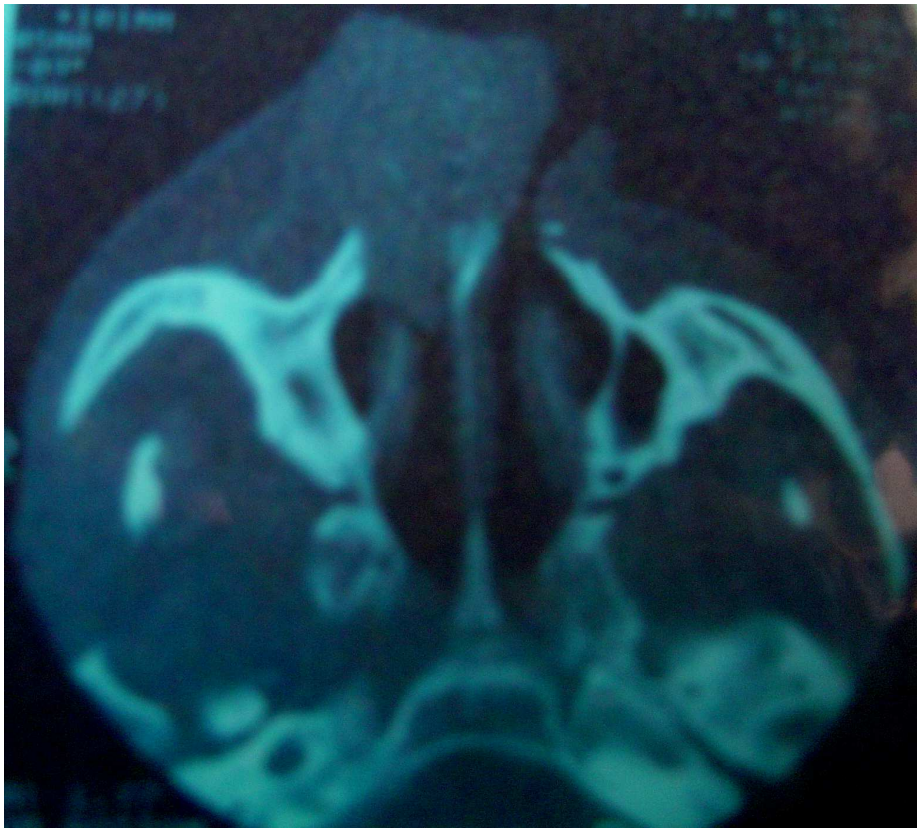

Figure 1: Facial CT axial section showing tumor tissue density process of the right nostril with maxillary bone loss (arrow)

REFERENCES

[1] Tournier-Rangeard L, Lapeyre M, Graff-Caillaud P, Mege A, Dolivet G, Toussaint B, *et al*. Radiotherapy for solitary extramedullary plasmacytoma in the head-and-neck region: A dose greater than 45 Gy to the target volume improves the local control. *Int J Radiat Oncol Biol Phys*. **2006**;64:1013-7.

[2] Alexiou C, Kau R, Dietzfelbinger H, Kremer M, Spiess J, Schratzenstaller B, *et al*. Extramedullary plasmacytoma: tumor occurrence and therapeutic concepts. Cancer. **1999**;85:2305-14.

[3] Shih L, Dunn P, Leung W, Chen W, Wang P. Localised plasmacytomas in Taiwan: comparison between extramedullary plasmacytoma and solitary plasmacytoma of bone. *Br J Cancer*. **1995**;71:128-33.

[4] Soutar R, Lucraft H, Jackson G, Reece A, Bird J, Low E, *et al*. Guidelines on the diagnosis and management of solitary plasmacytoma of bone and solitary extramedullary plasmacytoma. Clin Oncol (R Coll Radiol). **2004**;16:405-13.

[5] Dimopoulos M, Kiamouris C, Moulopoulos L. Solitary plasmacytoma of bone and extramedullary plasmacytoma. *Hematol Oncol Clin North Am*. **1999**;13:1249-57.

[6] De Chiara A, Losito S, Terracciano L, Di Giacomo R, Iaccarino G, Rubolotta M. Primary plasmacytoma of the breast. *Arch Pathol Lab* Med. **2001**;125:1078-80.

[7] Merrot O, Fayoux P, Maetz B, Darras J, Chevalier D. [Endonasal plasmocytoma: diagnosis and

management]. *Ann Otolaryngol Chir Cervicofac*. **2002**;119:296-300.

[8] Kumar P, Owji S, Talei A, Malekhusseini S. Extramedullary plasmacytoma. Fine needle aspiration findings. *Acta Cytol*. **1997**;41:364-8.

[9] Bolek T, Marcus R, Mendenhall N. Solitary plasmacytoma of bone and soft tissue. *Int J Radiat Oncol Biol Phys*. **1996**;36:329-33.

[10] Jyothirmayi R, Gangadharan V, Nair M, Rajan B. Radiotherapy in the treatment of solitary plasmacytoma. *Br J Radiol*. **1997**;70:511-6.

[11] Tsang R, Gospodarowicz M, Pintilie M, Bezjak A, Wells W, Hodgson D, *et al*. Solitary plasmacytoma treated with radiotherapy: impact of tumor size on outcome. *Int J Radiat Oncol Biol Phys.* **2001**;50:113-20.

[12] Nasr Ben Ammar C, Ghorbel I, Kochbati L, Gargouri W, Touati S, Maalej M. [Solitary and extramedullary plasmocytoma in the head and neck region: five cases report]. Cancer Radiother. **2010**;14:755-8.

[13] Holland J, Trenkner D, Wasserman T, Fineberg B. Plasmacytoma. Treatment results and conversion to myeloma. Cancer. **1992**;69:1513-7.

[14] Ben Salah H, Hdiji S, Makni S, Ghorbel A, Boudawara T, Elloumi M, *et al*. [Extramedullary plasmocytomas]. Cancer Radiother. **2012**;16:282-7.

[15] Susnerwala S, Shanks J, Banerjee S, Scarffe J, Farrington W, Slevin N. Extramedullary plasmacytoma of the head and neck region: clinicopathological correlation in 25 cases. *Br J Cancer.* **1997**;75:921-7.

.