

CASE REPORT

Extramedullary plasmacytoma of the nasal cavity: A case report

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ABSTRACT

Extramedullary plasmacytoma is a rare neoplasm characterized by monoclonal proliferation of plasma cells. It is most often located in the head and neck region. Extramedullary Plasmacytomas are more predominant in males who are in the 5th – 6th decade. In this report, this patient, who is a young female, presented to our clinic with history of intermittent nasal obstruction for the past year. She was diagnosed with extramedullary plasmacytoma and was subjected to radiotherapy. The clinical and histopathologic findings of plasmacytoma are discussed. In order to exclude systemic involvement, a systematic approach using clinical, laboratory and radiologic investigations was performed. Extramedullary plasmacytoma of the nasal cavity is rare and should be considered in the differential diagnosis of nasal cavity masses, especially in the young age group.

KEYWORDS: extramedullary plasmacytoma, multiple myeloma, Wiltshaw's classification.

INTRODUCTION

Extramedullary plasmacytoma is a rare neoplasm, often located in the head and neck region. In the nasal cavity, it represents about 4% of the tumors and accounts for 1 – 3% of human malignancies and it is common in the age group of 55 to 60 years and almost two-thirds of the patients are males^{1,2}. Although the etiology of this disease remains unknown, chronic irritation from inhalation and viruses has been suggestive³. Patients normally present with symptoms such as epistaxis, nasal discharge or nasal obstruction, but some remain asymptomatic^{1,2}. It is important to distinguish extramedullary plasmacytoma from other plasma cell tumors for the purposes of prognosis and treatment. The evaluation of a patient should include a biopsy of the suspected lesion for tissue histology, a bone marrow aspiration and biopsy.

CASE REPORT

This is a case report of a 33-year-old lady with no known medical history, who presented with occasional nasal blockage for more than a year. A nasal endoscopic examination showed a mass arising from the

right nasal septum, which was impinging on the right inferior and middle turbinates; it did not bleed to touch and was non tender (Figure 1). There were no palpable cervical neck nodes.

A biopsy from the mass revealed a plasma cell neoplasm that was in favour of plasmacytoma. Contrast Enhanced Computed Tomography of the paranasal sinuses and the ostiomeatal complex showed a suspicious-looking soft tissue mass lesion in the right nasal cavity (Figure 2).

The patient was then referred to the Haematology Department and myeloma was ruled out. Subsequently, she was referred to the Oncology Department and was planned for 25 fractions of radiotherapy.

DISCUSSIONS

Extramedullary plasmacytoma is predominant in the 5th-6th decade of life and it is found to be common in males^{1,2}. Almost 80% of the cases are found in the upper respiratory tract and 15% of them spread to the cervical lymph nodes⁴. In 15% of the cases, Extramedullary Plasmacytoma can progress to myeloma¹. Patients usually present with symptoms of rhinorrhoea, epistaxis and nasal obstruction^{1,2}. A routine



Figure 1 A mass arising from the right nasal septum.

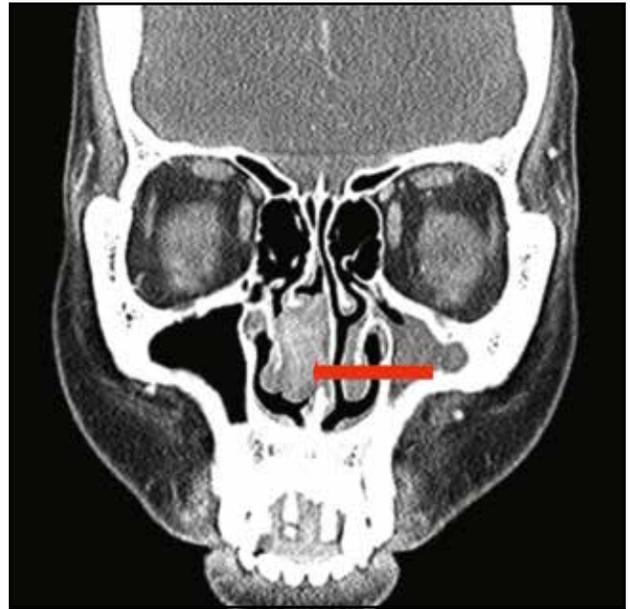


Figure 2 Cranio-facial CT scan showing the tumour arising from the septum.

nasal endoscopy may reveal a mass in the nasal cavity. Tissue biopsy with bone marrow study is necessary for the diagnosis. The treatment of choice for extramedullary plasmacytoma is surgical resection and radiotherapy⁵. Chemotherapy may be considered in patients with refractory or relapsed disease⁶. The percentage of cases which progress to multiple myeloma may vary between 11% and 30%, and is associated with a poorer prognosis¹.

Wiltshaw classified the soft-tissue plasmacytoma into 3 clinical stages, which are: Stage I – limited to an extramedullary site, Stage II – involvement of regional lymph nodes and Stage III – multiple metastasis⁵. In this case report, it is an atypical case of Stage I extramedullary plasmacytoma that occurs in a young female. Although rare, it is important to have a high index of suspicion to distinguish extramedullary plasmacytoma from normal lymphoid tissue in a younger adult in order to start treatment early, thus improving the prognosis.

CONCLUSIONS

Hereby, we present a rare case of extramedullary plasmacytoma of the nasal cavity in a young female who had only a vague nasal obstruction for more than a year. Extramedullary plasmacytoma of the nasal cavity is rare and would require a high index of suspicion. It should be one of the differential diagnoses of nasal cavity masses, especially in the young age group. A thorough clinical history, examination and proper laboratory and radiological investigations are impor-

tant to make a quick diagnosis and to start treatment early. This is to ensure a better prognosis and deter the progression of the disease.

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Contribution of authors: All authors have equally contributed to this work.

REFERENCES

1. Bachar G, Goldstein D, Brown D, Tsang R, Lockwood G, Perez-Ordóñez B, et al. Solitary extramedullary plasmacytoma of the head and neck—long-term outcome analysis of 68 cases. *Head Neck*. 2008;30(8):1012–9. DOI: 10.1002/hed.20821.
2. Kitamura A, Yamashita Y, Hasegawa Y, Kojima H, Nagasawa T, Mori N. Primary lymphoma arising in the nasal cavity among Japanese. *Histopathology*. 2005;47(5):523–32. DOI: 10.1111/j.1365-2559.2005.02265.x.
3. International Myeloma Working Group. Criteria for the classification of monoclonal gammopathies, multiple myeloma and related disorders: a report of the International Myeloma Working Group. *Br J Haematol*. 2003;121(5):749–57.
4. Attanasio G, Viccaro M, Barbaro M, De Seta E, Filipo R. Extramedullary plasmacytoma of paranasal sinuses. A combined therapeutic strategy. *Acta Otorhinolaryngol Ital*. 2006;26(2):118–20.
5. Wiltshaw E. The natural history of extramedullary plasmacytoma and its relation to solitary myeloma of bone and myelomatosis. *Medicine (Baltimore)*. 1976;55(3):217–38.
6. Creach KM, Foote RL, Neben-Wittich MA, Kyle RA. Radiotherapy for extramedullary plasmacytoma of the head and neck. *Int J Radiat Oncol Biol Phys*. 2009;73(3):789–94. DOI: 10.1016/j.ijrobp.2008.04.077. Epub 2008 Aug 15.