



Oropharyngeal Extramedullary Plasmacytoma; A Case Report

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Abstract

Introduction: Solitary plasmacytoma is an uncommon type of plasma cell dyscrasia, which might occur in bone or soft tissue. Soft tissue solitary plasmacytoma or extramedullary plasmacytoma is less frequent than bone plasmacytoma. The most common location for extramedullary plasmacytoma is nasopharynx and paranasal sinuses.

Case Presentation: Oropharyngeal plasmacytoma is very rare; hence we would like to share our experience. The patient was a 57 year-old man with 2 months history of dysphagia with a foreign body sensation. Total tumor resection was done and he received 40 Gy radiation. After 24 months of follow up the patient was well and disease free.

Conclusion: according to the presented case, a plasmacytoma should be considered in patients with dysphagia and oropharyngeal lesion. These masses can be treated with surgical excision and radiotherapy.

Keywords:

plasmacytoma;
oropharynx;
radiotherapy;
Extramedullary

Introduction

Plasma cell neoplasms are a heterogeneous group of diseases and solitary plasmacytomas are even less common. These lesions consist of monoclonal plasma cells (1,2). Extramedullary plasmacytoma (EMP) are rare tumors and usually detected in head and neck area with incident rate of 0.04 in 100000 people (4,3). They are usually present in lymphoid tissues of nasal cavity,

paranasal sinuses and nasopharynx (5,4). Oropharyngeal EMP is a rare type of plasmacytomas, and here we have reported a case, treatment and 2 years follow up.

Case presentation

Our patient was a 57-year-old man with 2 months history of dysphagia with a foreign body sensation. Patient was visited by an ENT specialist and a lesion was detected on oropharynx



Figure1. Axial CT image without contrast shows a soft tissue lesion (white arrow) in right side of oropharynx

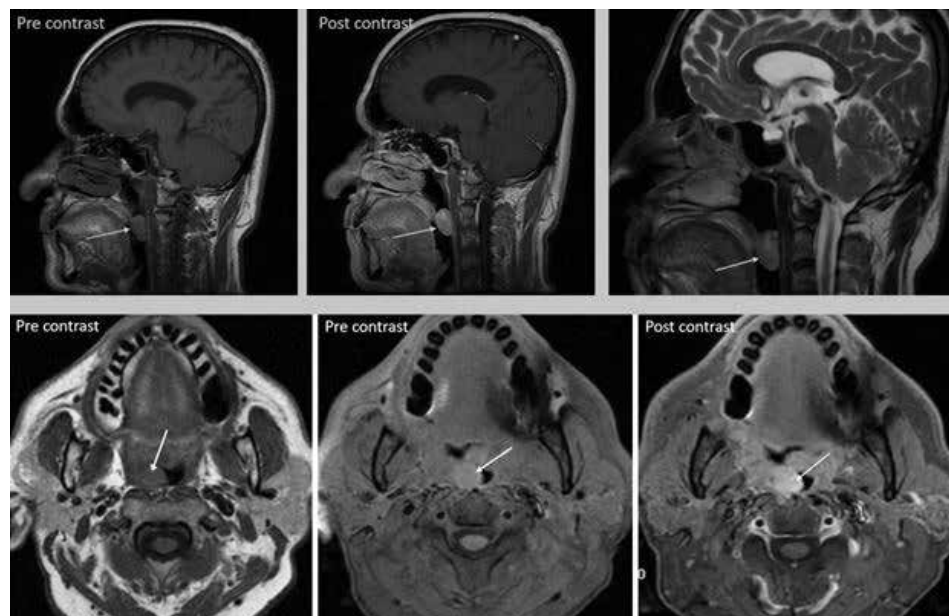


Figure 2. T2W and T1W MR images (Pre and post contrast) showing an enhancing lesion (white arrows) in right side of oropharynx, which has inhomogeneous iso and hyposignal on T1W images and inhomogeneous iso and hypersignal on T2W images.

during physical examination. Spiral CT scan without contrast of paranasal sinuses showed a suspicious soft tissue density in hypopharynx at level of epiglottis. His Neck MRI with and without contrast showed oropharyngeal polypoid projection suggesting a malignant tumor in the right lateral aspect of oropharynx (figure 2-1). This mass was excised and the pathology result confirmed plasmacytoma (fig 3). All laboratory tests, including CBC, BUN Cr, liver function tests, ESR, Calcium, Phosphor, serum protein electrophoresis

and bone marrow biopsy were normal. Patient received 40 Gy radiation in 20 fraction into tumor bed. After 24 months of follow up the patient is well and disease free.

Discussion

Solitary plasmacytomas are monoclonal plasma cells proliferation outside bone marrow and consist %5-3 of plasma cell neoplasms. When a patient with plasmacytoma has renal insufficiency, bone lesions, anemia, hypercalcemia, and

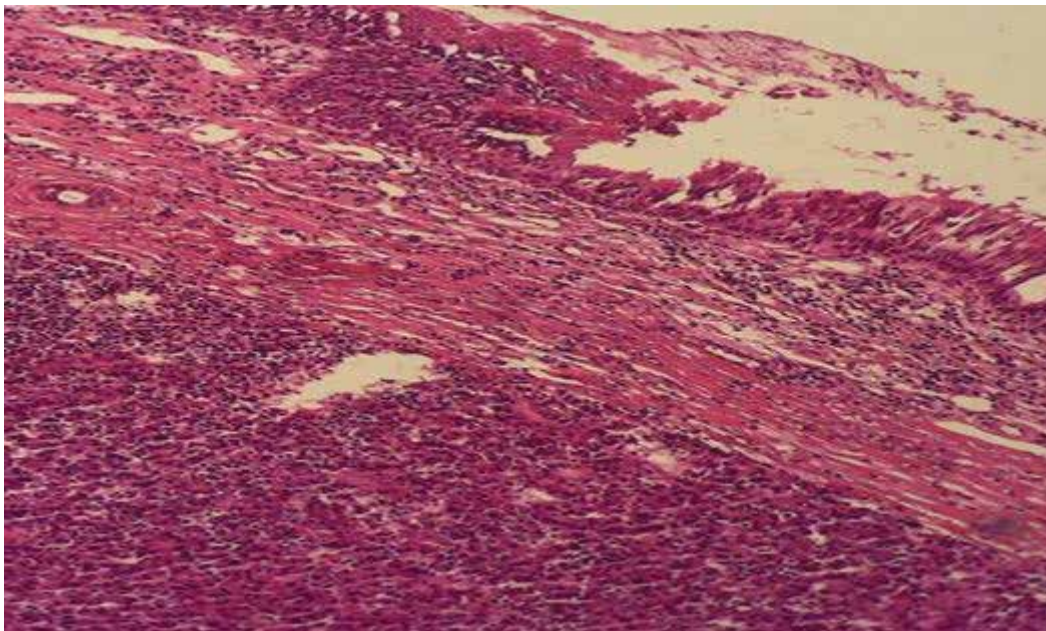


Figure 3. infiltration of monomorphic neoplastic plasma cells with scant cytoplasm under the respiratory epithelium of oropharynx. hematoxylin and eosin, x100

bone marrow involvement by plasma cells, the disease has progressed to multiple myeloma. It seems that the disease behavior is different when it occurs in bone or outside the bone (8-6). In a large series of 25 patients, the most common site of extramedullary plasmacytoma, was paranasal sinus (2). In a series of 13 patients in our center, the most common site was nasopharynx and paranasal sinus. Until that time we had no case of oropharyngeal plasmacytoma (9).

Plasmacytoma is a rare disease and its prognosis in extramedullary plasmacytoma is better than bone plasmacytoma (4-6). However, in a series of 84 patients with plasmacytoma, 7 local recurrences had occurred. Five local recurrences were observed among 25 patients with extramedullary plasmacytoma and 2 local recurrences were reported in 59 patients with bone plasmacytoma. In this report, progression to multiple myeloma in patients with bone plasmacytoma was higher than extramedullary plasmacytoma. After 5 years, %56 of patients with bone plasmacytoma and %30 of extramedullary

plasmacytoma developed multiple myeloma (2).

In a study by Ozsahin, the mean age of 256 patients with solitary plasmacytoma was 60 years and male/female ratio was 1.8. The mean age of patients in our center with solitary extramedullary plasmacytoma, was 51 years with male/female ratio of 3/10. The present case was a 57 year old man (9,6).

Treating solitary plasmacytoma is controversial and data comes from retrospective studies. Although there is no well designed prospective study, the treatment of choice is surgery and RT. The role of radical surgery is up for debate (10,6). Multiple programs for RT are used in different centers. Some authors believe that larger doses are better than lower doses, but in Ozsahin's study no difference was found (6). Our patient underwent surgery combined with RT with a dose of 40 Gy in 20 fractions.

In Ozsahin's study, 5 and -10year survival rate of patients with solitary plasmacytoma was %74-54. In this study, age was a significant factor in progression to multiple

myeloma (6) and other studies have shown similar results. The 5 year survival of 59 patients reported by Reed was 2) %78). We followed up this patient for 24 months and he is still disease free.

Lesion size in our patient was 25*60 mm, and some authors have stated that size is a prognostic factor. Ozsahin found that plasmacytoms that are less than 4 cm have a better prognosis (6). But in other studies size was not an important factor (2).

Conclusion: according to the presented case, a plasmacytoma should be considered in patients with dysphagia and oropharyngeal lesion. These masses can be treated with surgical excision and radiotherapy.

Acknowledgment

The authors wish to thank Mr. H. Argasi at the Research Consultation Center (RCC) of Shiraz University of Medical Sciences for his invaluable assistance in editing this manuscript.

Authors' Contributions

AM and MK presented the case and drafted the manuscript. SB and ESK helped in manuscript drafting and data presentation. DJ and HS helped in manuscript drafting and designed the study. All authors have approved the final version of manuscript.

Conflict of Interest Disclosures

There are no conflicts of interest in terms of the present manuscript.

Ethical approval/Consideration:

A written informed consent was signed by patient for reporting his case. All the personal information remained anonymous.

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