Cutaneous Extramedullary Plasmacytoma

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Abstract

Extramedullary plasmacytoma (EP) is that the progression of myeloma which will occur at any stage of the disease. EP is that the proliferation of plasma cells outside the bone marrow. the foremost common location for EP is that the head and neck. In rare instances it can involve connective/soft tissues and therefore the skin. This case will discuss the rare cutaneous presentation of additional medullary plasmacytoma. A 51 yo female presented to the emergency department complaining of difficulty walking thanks to acute onset of severe left thigh pain and right shoulder pain. No history of injury was noted. A right shoulder and left femur X-ray was completed showing lytic lesions and a pathological fracture of the femur. Bone biopsy resulted in features for myeloma. She was started on chemotherapy and through the course of disease she developed multiple cutaneous fumigated and ulcerated nodules. Punch biopsy resulted in plasmacytoma representing the rare presentation of cutaneous extra medullary plasmacytoma.

Keywords: : Cutaneous plasmacytoma, plasmacytoma, multiple myeloma

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Introduction

Primary cutaneous plasmacytoma (pcp) could be a rare disease, with few studies to guide therapy. Our primary study objective was to define treatments used for pcp; a secondary objective was to explain outcomes of patients, including disease recurrence and death.

An institutional cancer registry was wont to identify cases for retrospective chart review. in an exceedingly systematic review, treatments for, and outcomes of, all known cases of pcp were described.

Three eligible cases identified at our institution; each patient had a solitary pcp. The systematic review identified 66 patients. Radiotherapy was the foremost commonly used primary treatment modality (31% of all patients; 42% for patients with solitary lesions), followed by surgery (28% of all patients; 36% for patients with solitary lesions). Median survival for all patients was 10.4 years [95% ci: 4.3 years to not reached], with a trend toward a decreased risk of death with solitary lesions compared with multiple lesions (hazard ratio: 0.37; 95% ci: 0.13 to 1.08; p = 0.059). For patients with solitary lesions, the median and recurrence-free survivals were, respectively, 17.0 years (95% ci: 1.7 years to not reached) and 11.0 years (95% ci: 2 years to not reached); for patients with multiple lesions, they were 4.3 years (95% ci: 1.3 to not reached) and 1.4 years (95% ci: 0.6 years to not reached). Disease recurrence, including progression to myeloma, was the foremost common explanation for death.

Compared with patients having multiple pcp lesions, those presenting with one pcp lesion might experience longer overall survival. Local therapy (radiation or surgery) may be a reasonable curative treatment for a solitary pcp lesion. Malignant lymph cell proliferation is presented as a part of disseminated disease of myeloma, as solitary plasmacytoma of bone, or in soft tissue as extramedullary plasmacytoma. Extramedullary plasmacytomas represented approximately 3% of all lymphocyte proliferation.

Approximately 80% of extramedullary plasmacytomas occur within the head and neck region while the opposite 4% occur within the skin and to a lesser extent within the lip. during this paper, we report a rare case of primary cutaneous plasmacytoma involving the lip during a 65-year-old male. The patient presented with a nonhealing lower lip sore for the past 3 years. Upon further workup, there was no evidence of myeloma or light chain disease. The patient was treated with radiation and his last follow-up revealed no evidence of myeloma or light chain disease.

Cutaneous plasmacytomas usually present clinically as alopecic, pink, raised, round, and well circumscribed growths of 1–2 cm in diameter. These are often reported in 5 to 11-year-old dogs with greatest breed predisposition for West Highland White Terriers, Golden Retrievers, Labrador Retrievers, Cocker Spaniels and Standard Poodles; however, plasmacytomas have also been reported

in other breeds. Cutaneous plasmacytomas are benign and show no recurrence after complete surgical excision of the tumor; however, incompletely excised cutaneous neoplasms are known to recur. Oral plasmacytomas are biologically more aggressive than cutaneous counterparts and might undergo local invasion into the underlying bone, however a whole surgical excision of the mass leads to only rare recurrence or metastasis.Primary extramedullary plasmacytoma may be a rare plasmacyte neoplasm that happens as an isolated finding without detectable underlying myeloma. Uncommonly, it's been reported to occur within the skin as a primary cutaneous plasmacytoma (PCP). We describe a case of an asymptomatic plaque on the rear that was found to contain a monoclonal proliferation of plasma cells without evidence of systemic disease despite thorough evaluation. We also include a quick discussion of PCPs, including diagnosis and treatment.

Multiple myeloma (MM) is a hematologic malignancy involving proliferation of monoclonal plasma cells1. The disease is often confined to the bone and bone marrow, but other organ involvement can sometimes occur1. MM occurring in organs besides the bone or the bone marrow is called the extramedullary plasmacytoma, and MM occurring as a result of metastasis is called the metastatic plasmacytoma or the secondary extramedullary plasmacytoma. Few cases of MM occurring at sites of trauma and surgery have been reported, suggesting trauma-specific plasma cell migration1. We herein report an interesting case of secondary cutaneous plasmacytoma at the surgical site of fracture repair..

A 66-year-old man visited a local hospital complaining of dizziness and was diagnosed with MM about five years ago. Quantitative immunoglobulins from serum revealed total IgA level of 6,340 mg/dl (normal 68~378 mg/dl) with decreased IgG and IgM levels. Both serum and urine immunofixation showed monoclonal gammopathy of IgA, lambda type. A bone marrow aspirate demonstrated 60% plasma cell infiltration, which confirmed a diagnosis of IgA lambda MM. The patient received two cycles of cyclophosphamide, dexamethasone, and thalidomide chemotherapy followed by autologous bone marrow transplantation and autologous peripheral blood stem cell transplantation. However, MM recurred after eight months with 11.2% of plasma cells in the bone marrow and eight courses of velcade and dexamethasone (VD) chemotherapy were conducted over nine months. And the MM recurred once again in the bone marrow and the mandible, so he received additional radiotherapy (RTx) on his mandible for ten times. After his RTx, another VD chemotherapy regimen was added to his therapy but the disease did not regress.

References

1) P. Galienia, M. Cavi, S. Pulsoni et al., “Clinical outcome of extramedullary plasmacytoma,” Haemtologica, , 2000.

2) D. S. Tsang, L. W. Le, V. Kukreti, and A. Sun, “Treatment and outcomes for primary cutaneous extramedullary plasmacytoma: a case series,” Current Oncology, 2016.

3) R. Willemze, E. S. Jaffe, G. Burg et al., “WHO-EORTC classification for cutaneous lymphomas,” Blood, 2005.

4) C. Prada-García, M. Lamoca-Martín, and M. Rodríguez-Prieto, Actas Dermo-Sifiliográficas, 2012.

5) A. Wuu, S. D. Bangert, D. M. Weber, and S. R. Hymes, “Primary cutaneous plasmacytoma,” 2014.

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