Medical Oncology (2000) 17, 74–75
 1357-0560/00 $15.00
www.nature.com/mo

CASE REPORT

Primary eyelid plasmacytoma

L Olivieri[1], M Di Ianni[1], M Giansanti[2], B Falini[1] and A Tabilio[1]*

[1]*Department of Clinical and Experimental Medicine, Hematology and Immunology Section and* [2]*Pathology Unit, University of Perugia, Perugia, Italy*

We report a case of eyelid plasmacytoma. The patient presented with a superficial lesion on the upper left eyelid, 10×7 mm in size. Histological and immunohistochemical findings were indicative of plasmacytoma with slightly abnormal sub-epidermic plasma cell infiltrates. Immunoperoxidase staining was strongly positive for intracytoplasmic κ light chains. No infiltration by atypical plasma cells could be documented in the bone marrow biopsy and aspirate. Skeletal survey showed no osteolytic lesions or osteoporosis. The tumor on the left eyelid was surgically removed. No radiotherapy was administered.
Medical Oncology (2000) **17**, 74–75

Keywords: eyelid; solitary plasmacytoma; immunoperoxidase

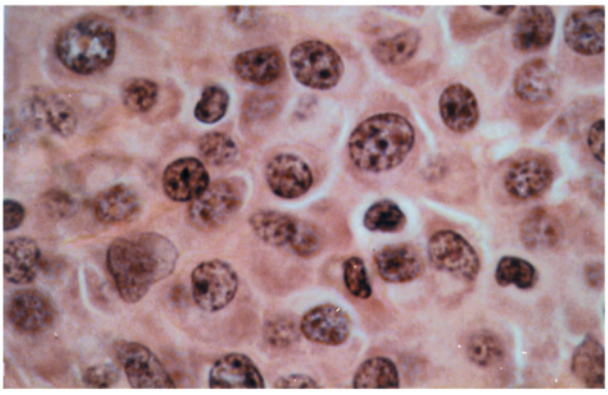
Introduction

Extramedullary plasmacytoma accounts for 2–10% plasma cell dyscrasias.[1] This tumor is usually localized in the nasopharynx, oropharynx, gastrointestinal tract, skin and more rarely in lymph nodes and spleen.[2–6] Primary plasmacytomas in the ocular area are extremely rare. To the best of our knowledge only one case in the conjunctiva has been reported.[7] Here we present a report of plasmacytoma confined to the eyelid in a young man.

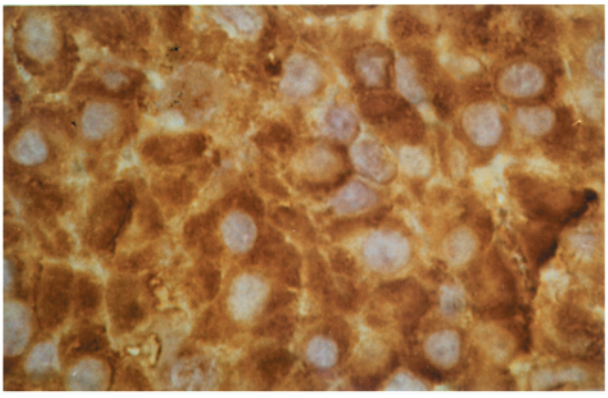
Case presentation

A 33-year-old man was referred to our unit in March 1998 because of the onset of a superficial tumor on the left eyelid two months earlier. No history of ocular inflammation or trauma was recorded. Clinical examination showed a small, round, slightly raised lesion about 10×7 mm in size which was painless upon palpation. Blood tests were normal: Hb 150 g/l; platelets 244×10^9/l; leucocytes 8.13×10^9/l. The leucocyte differential count and lymphocyte immunophenotyping were normal. Serum and urinary immunofixation were negative for M component. The β_2-microglobulin level was normal. Bone marrow aspirate and biopsy were negative for plasma cell infiltration; skeleton X-rays were negative for focal lesions and osteoporosis. An abdominal ultrasound scan was normal. The lesion was asported under local anesthesia and histological examination showed a diffuse sub-epidermal infiltration of atypical plasma cells (Figure 1a). Immunoperoxidase staining showed intracytoplasmic monotypic restriction for κ light chains (Figure 1b). On the basis of the clinical, laboratory and histological findings, solitary plasmacytoma was diagnosed. No radio- or chemotherapy was administered. The patient undergoes clinical check-ups and blood tests every 3 months and appears to be in perfect health.

*Correspondence: Dr Antonio Tabilio, Department of Clinical and Experimental Medicine, Haematology and Immunology Section, University of Perugia, Policlinico, Monteluce, Via Brunamonti, 06122 Perugia, Italy
Tel: (+39) 075 5783990; Fax: (+39) 075 5726449;
E-mail medemat@unipg.it
Reviewed 29 July 1999; accepted 9 August 1999



a



b

Figure 1 *Histological findings in the eyelid lesion (mag. ×100). (a) Haematoxilin-eosin staining shows marked atypical plasma cell infiltration. (b) Immunoperoxidase staining shows strong positivity for κ light chain.*

Discussion

Involvement of the eye, the ocular adnexa and orbits rarely occurs in the course of multiple myeloma.[8,9] Solitary plasmacytoma in the ocular area is even more infrequent.[7,10]

The earliest reports of conjunctival plasma cell tumours date from the early 1900s but according to present criteria most of these lesions can be identified as benign reactive plasma cell granulomas secondary to inflammation (reviewed in ref. 7). Seddom *et al*[7] described a case of true plasmacytoma of the palpebral conjunctiva which, for several years, was not associated with clinical or laboratory signs of multiple myeloma.

Our case of plasmacytoma was limited to the eyelid with, unlike other reports, no M component in the serum, a normal β_2-microglobulin and no evidence of myeloma in any other site. Immunohistochemical findings confirmed the diagnosis of plasmacytoma and excluded benign reactive plasmacytosis. Lymphoplasmacytoid lymphoma could be excluded on the basis of morphological findings and also because no surface light chains could be detected by immunohistochemistry.

Treatment of solitary extramedullary plasmacytoma is usually local radiotherapy and/or surgery. We opted for surgical asportation with regular close follow-ups, to monitor any eventual development of multiple myeloma, because, although tending to evolve less than solitary plasmacytoma of bone, this risk cannot be completely excluded.

Acknowledgments

The authors would like to thank Dr GA Boyd for her help and comments, and Dr R Lupi for her secretarial assistance.

References

1 Woodruff RK, Whittle JM, Malaps JS. Solitary plasmacytoma. I: Extramedullary soft tissue plasmacytoma. *Cancer* 1979; **43**: 2340–2343.
2 Canlas MS, Dillon ML, Loughrin JJ. Primary cutaneous plasmacytoma. *Arch Dermatol* 1979; **115**: 722–724.
3 Galieni. P *et al*. Solitary plasmacytoma of bone and extramedullary plasmacytoma: Two different entities. *Ann Oncol* 1995; **6**: 687–691.
4 Colovic MD, Jankovic GM, Colovic RB, Martinovic-Cemerikic VM. Non-secretory solitary plasmacytoma of the spleen. *Med Oncol* 1998; **15**: 286–288.
5 Marsch WC, Gross UM. Frequency and pathomorphology of extramedullary manifestations in plasma cell myeloma of skeleton. *Pathol Res Pract* 1978; **163**: 115–127.
6 Pietrogrande F, Stefani PM, Poletti A. An unusual localization of primary plasmacytoma. *Haematologica* 1998; **83**: 567–568.
7 Seddon JM, Corwin JM, Weiter JJ, Brisbane JU, Sutula FC. Solitary extramedullary plasmacytoma of the palpebral conjunctiva. *Br J Opthal* 1982; **66**: 450–454.
8 Benjiamin I, Taylor H, Spindler J. Orbital and conjunctival involvment in multiple myeloma. Report of a case. *Am J Clin Pathol* 1975; **63**: 811–817.
9 Rodman HI, Font Rl. Orbital involvement in multiple myeloma. *Arch Ophthal* 1972; **87**: 30–35.
10 Azar HA. Pathology of multiple myeloma and related growths. In: Azar HA, Potter M (eds), Multiple Myeloma and Related Disorders. Harper and Row: New York, 1973, pp 2–26.