Primary extranodal variant of non-Hodgkin's lymphoma

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Accepted 20 January 2014

DESCRIPTION

A 50-year-old man presented with a swelling on the right mandible persisting for 3 months. The swelling rapidly increased in size causing difficulty in deglutition (figure 1A). A solitary oval extraoral swelling measuring 6×4 cm extended from the right body region to the symphysis menti (figure 1B). Intraoral examination revealed missing right mandibular teeth along with obliteration of the vestibule. Buccal and lingual cortical plate expansions were evident (figure 1C). On palpation mobility of the right lower border of the mandible was observed. The orthopantomogram revealed a destructive radiolucent lesion with a pathological fracture (figure 1D). Histopathologically the specimen revealed a proliferation of large lymphocytic appearing cells with varying degree of differentiation in a diffuse pattern. Marked pleomorphism and tumour giant cells were also seen (figure 1E). Immunohistochemistry, CD20 (figure 1F) and leucocyte common antigen tests were positive whereas CD3 and cytokeratin were negative. Thus the final diagnosis of diffuse large B-cell lymphoma was performed.

In medical oncology department tests like haemogram, serum chemistry was performed which seemed to be within normal limits. Test for HIV was non-reactive. CT scan, positron emission tomography and

bone marrow biopsy were also performed to assess the extent of disease. The patient was categorised as having stage 1AE (A: the absence of constitutional symptoms is denoted by adding an "A" to the stage; E: is used if the disease is "extranodal" (not in the lymph nodes) or has spread from lymph nodes to adjacent tissue), primary mandibular non-Hodgkin's lymphoma and advised six cycles of combination chemotherapy with cyclophosphamide, hydroxydaunorubicin, oncovin, prednisolone treatment combined with rituximab.

The mandible accounts for 0.6% of isolated non-Hodgkin's lymphomas.¹ Owing to the non-specific nature of the presenting symptoms like swelling, paresthesia and mobility of teeth, the diagnosis of these tumours is difficult.²

Learning points

- ▶ Extranodal B-cell lymphoma occurring in the mandible accounts for 0.6% of cases.
- ▶ Lymphoma should be considered in the differential list of a mandibular swelling.
- ▶ Microscopic examination is mandatory even when the lesion appears apparently benign.

Figure 1 (A) Extraoral view of swelling on left side of the mandible. (B) Note the extension of swelling. (C) Intraoral view showing missing teeth and obliterated vestibule. (D) Orthopantomogram showing destructive radiolucent lesion with pathological fracture. (E) Proliferating of large pleomorphic lymphocytic appearing cells in a diffuse pattern. (F) Positive CD 20 marker for B-cell lymphoma.

To cite: Tina JE, Narayanaswamy M, Sundaresh KJ, et al. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-010132

Contributors All authors have made substantive contribution to this manuscript and reviewed the final paper prior to its submission.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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