



Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

Granular cell tumour developing in the background of a previous mandibular giant cell lesion: Case report

Akeel Mosea (Jordanian Board (OMFS), FFDRCSI (OSOM), Dip Imp Dent RCS(Eng), MFDRCSI, BDS) (Specialty Doctor in Oral and Maxillofacial Surgery)^{a,*}, Yasir Alwahab (FRCPath, MB ChB) (Consultant Histopathologist)^b, Kieran Coghlan (FRCS, FFDRCSI, MB, BCh, BDS) (Consultant Oral and Maxillofacial Surgeon)^a

^a The Princess Alexandra Hospital, Harlow, United Kingdom

^b Kingston Hospital, Kingston KT2 7QB, United Kingdom

ARTICLE INFO

Article history:

Received 23 July 2016

Received in revised form

20 September 2016

Accepted 20 September 2016

Available online 23 September 2016

Keywords:

Case report

Granular cell tumour

Giant cell lesion

ABSTRACT

INTRODUCTION: Granular cell tumours of the mandible are very rare. We present a unique case which has developed at the site of a previous giant cell lesion.

PRESENTATION: 51 year old Caucasian lady had excision of a recurrent giant cell lesion of the anterior mandible. Follow up showed evidence of radiographic recurrence. However, further biopsies from the same site showed granular cell tumour with soft tissues extension. The patient remains well on long term follow up with no evidence of recurrence.

DISCUSSION: This case is unique because the granular cell tumour has evolved from the site of a recurrent giant cell lesion. Conservative surgical excision was an adequate treatment option.

CONCLUSION: Within the limitations of our case study, a correlation between granular cell tumour and giant cell lesion is possible. However, more research is needed to prove this.

© 2016 The Author(s). Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Case report

A 51 year old female had a central giant cell lesion removed from her mandible 12 years before presentation but unfortunately the old records were not available for reference. She was referred by her dentist to our oral and maxillofacial surgery unit for possible recurrence of the lesion. The patient was asymptomatic apart from slight altered sensations in her left lower lip and chin which has been there since her operation 12 years previously. There was no local teeth mobility but there was tilting of the roots. There was also expansion buccally. Orthopantomogram showed an irregular well defined 4.5 cm × 2.5 cm radiolucency extending from the lower left second premolar to the lower right canine roots (Fig. 1). The roots of the lower left canine, first and second premolars were tilted distally while the root of the lower left second incisor was tilted mesially.

The patient underwent incisional biopsy of the anterior part of the bony lesion. Histology confirmed a recurrent giant cell granuloma (Fig. 2). She subsequently underwent surgical curettage of the entire bony lesion under general anaesthesia.

* Corresponding author at: Dept. of Oral and Maxillofacial Surgery, The Princess Alexandra Hospital, Hamstel Road, CM20 1QX, United Kingdom.

E-mail address: akeel.mosea@pah.nhs.uk (A. Mosea).

The patient was followed up clinically and radiographically. Serial Orthopantomograms showed shrinkage of the lesion with less tilting of the involved roots. Blood tests for corrected Calcium, Albumin and Phosphate were all normal.

The patient had a follow up CBCT scan at 18 months interval which showed two residual isolated areas of radiolucency in the mandible of approximately 1.0 cm in diameter: one in the lower central incisors area, the other in the lower left second premolar area. She underwent further curettage of the two residual lesions.

Histology of the specimens confirmed a recurrent giant cell lesion in the lower left premolar region. However, Histology of the second lesion in the lower right incisor region was reported as a granular cell tumour (Fig. 3).

Histopathology demonstrated cells that were polygonal shaped with oesinophilic cytoplasm, strongly positive on PAS staining. The nuclei were ovoid with inconspicuous nucleoli. The cells had a syncytial arrangement. Where present, the stroma was densely fibrous. Only occasional inflammatory cells were noted. The cells were strongly positive for CD68 immunostain.

At 4 weeks follow up, the patient had developed some granulation type tissue in the lower labial mucosa opposite the anterior surgery site. This new mucosal lesion was excised under local anaesthetic and demonstrated a recurrent granular cell tumour on histopathology (Fig. 4). The neoplastic cells were highlighted by

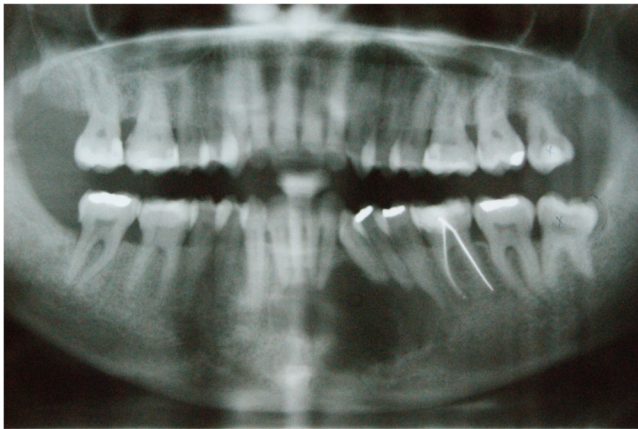


Fig. 1. Radiograph at presentation.

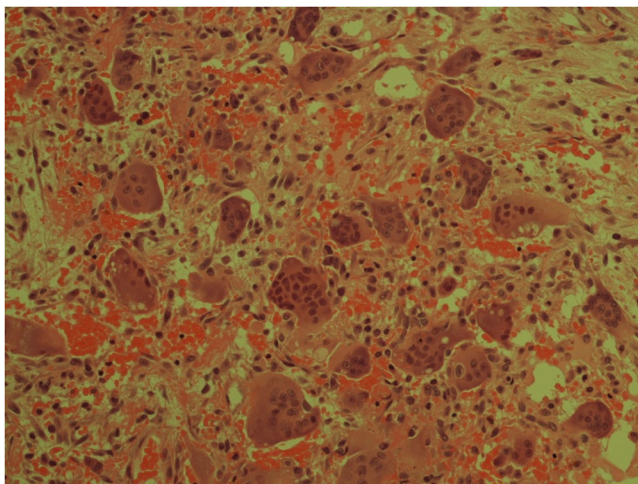


Fig. 2. Giant cell lesion.

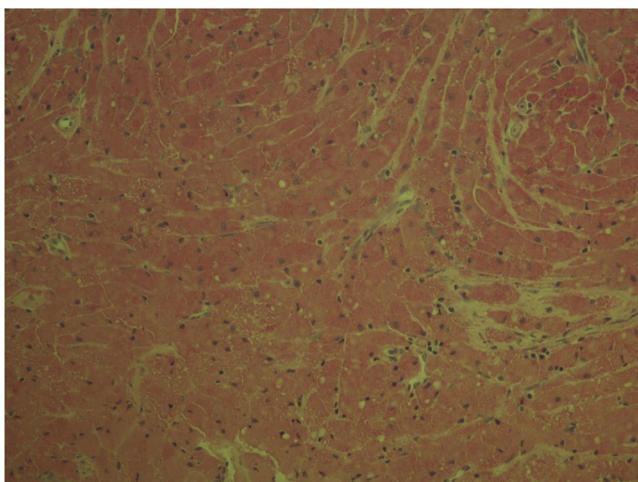


Fig. 3. Granular cell tumour.

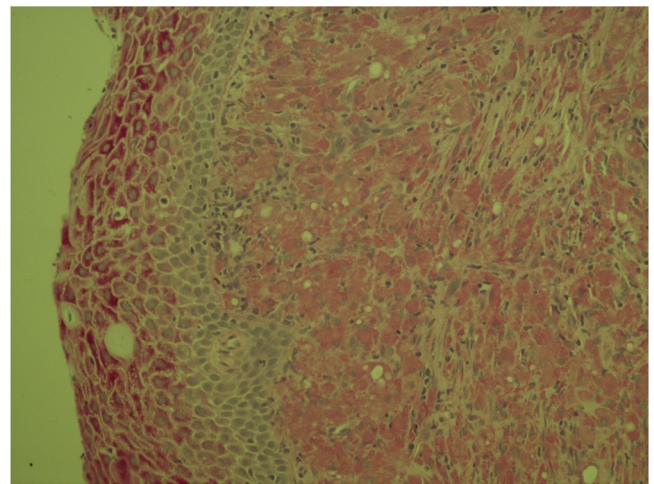


Fig. 4. Recurrent granular cell tumour.

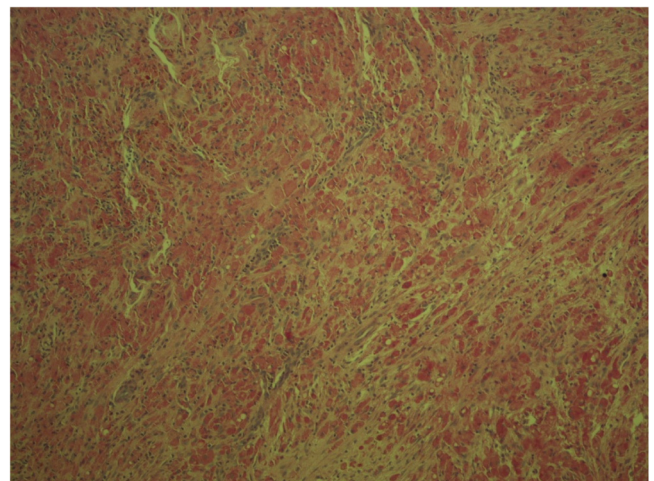


Fig. 5. Granular cell tumour.



Fig. 6. (One year follow up radiograph since the last surgery).

CD68 and S100. There was no evidence of atypia or malignancy. The tumour was incompletely excised.

A further CBCT scan was carried out demonstrating no bony infill of the lesion of the anterior mandible and a possible increase in size. The lesion in the lower left premolar region had shrunk in size and there was good bony infilling.

Further curettage of the lesion in the anterior mandible with removal of the overlying soft tissues and periosteum was carried out. Histology demonstrated features of fibrosis only in the bony cavity, and features of granular cell tumour in the soft tissues specimen (Fig. 5). Again there was no giant cell lesion.

The patient remains well on follow up. A year later orthopantomogram showed very good bony fill of the lesions (Fig. 6).

Download English Version:

<https://daneshyari.com/en/article/4288126>

Download Persian Version:

<https://daneshyari.com/article/4288126>

[Daneshyari.com](https://daneshyari.com)