Primary oral tuberculosis in a sexagenarian female

B N Yathindra Kumar,¹ N Manish,² Rachappa Mallikarjuna,³ K J Sundares⁴

¹Department of Oral Pathology and Microbiology, Rajarajeswari Dental College and Hospital, Bengaluru, Karnataka, India

²Department of Oral Pathology and Microbiology, Bangalore Institute of Dental Sciences, Bengaluru, Karnataka, India

³Department of Pedodontics and Preventive Dentistry, KM Shah Dental College and Hospital, Vadoadara, Gujarat, India

⁴Department of Conservative and Endodontics, K.M. Shah Dental College and Hospital, Vadoadara, Gujarat, India

Correspondence to

Dr Rachappa Mallikarjuna, mmrachappa@gmail.com

DESCRIPTION

A 61-year-old female patient reported with pain in the right-middle third of the face and associated swelling since 3 months. On eliciting history, patient had undergone extraction of maxillary right anterior teeth following which patient experienced pain (figure 1). Fifteen days later, swelling appeared in the same area with pain, which was gradual in onset and intermittent. Extraoral examination revealed a solitary swelling roughly 1 cm in diameter present on the right side of the face below the ala of the nose. Intraoral examination revealed vestibular obliteration in relation to right maxillary canine. Orthopantomogram, intraoral periapical radiograph of maxillary right anterior region and chest radiograph were inconclusive (figures 2–4). Ziehl-Neelsen stain was negative where as Mantoux test was positive. Histopathological examination revealed a presence of caseation necrosis (figure 5), areas of epithelioid cells and Langhans cells (figure 6), which were suggestive of tuberculosis. Positive polymerised chain reaction results confirmed the presence of *Mycobacterium tuberculosis* in the tissue samples. Based on the results of

above investigations, diagnosis of primary tuberculosis was carried out.

Oral tuberculosis accounts for 0.05–1.5%. Primary lesions develop when tuberculosis bacilli are directly inoculated into the oral tissues from an exogenous source. Common sites are gingiva, vestibular mucosa and extraction sockets.^{1 2} Positive tuberculin skin test indicates previous exposure to *M tuberculosis*. Although presumptive diagnosis of

Figure 1 Intraoral clinical image.

Figure 2 Orthopantomogram.

Figure 3 Intraoral periapical radiograph of maxillary right anterior region.

Figure 4 Chest radiograph.

To cite: Kumar BNY, Manish N, Mallikarjuna R, et al. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-008944

Figure 5 Showing areas of caseation necrosis.

Figure 6 Areas of epithelioid cells and Langhans giant cell.

tuberculosis is based on histopathological examination and identification of the bacilli in tissues using Ziehl-Neelsen stain.^{1 3} Hence, oral manifestations must be properly recognised if the patient is to receive appropriate diagnosis and referral for treatment.

Learning points

- ▶ Tuberculosis is among the top three causes of death for women, and should be considered.
- ▶ Consider primary oral tuberculosis as one among the differential diagnosis.
- ▶ Mandatory histopathological examination for every lesion.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Tanwar R, Iyengar AR, Nagesh KS, *et al.* Primary tuberculosis: an unusual finding in the oral cavity. *Oral Health Dent Manag* 2012;11:23–8.
- 2 Ramos JM, Reyes F, Tesfamariam A. Childhood and adult tuberculosis in a rural hospital in Southeast Ethiopia: a ten-year retrospective study. *BMC Public Health* 2010;10:215.
- 3 Cengiz MI, Cengiz K, Aydin O. Primary oral tuberculosis following dental extraction in a patient undergoing hemodialysis: a case report. *J Clin Med Res* 2011;3:73–81.

Copyright 2013 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow