DENTAL TRIBUNE

CPD Self Assessment in Clinical Dentistry

Dr Wong Foot Meow, BDS (Mal) FDSPRCP(S) (Glasg) FICD AM (Mal) FICOI

Prelude
This is a new section of the CDE Self Assessment Series in Clinical Dentistry. Quiz Questions. Note that we have decided to be more clinically orientated with more emphasis on medically related conditions that can affect dental treatment. In this section, we will delve into the intricacies of some soft tissue and dental anomalies. This dental quiz serves to update your CDE prowess.

Question 1: Differential Diagnosis of Jaw Cysts and Tumours
The most common intra-bony non-inflammatory diseases in the jaws are odontogenic cysts and tumours. However, in the differential diagnosis of jaw lesions, the following must also be considered: i.e., non-plasms, primary and metastatic tumours, developmental lesions, fibroseous lesions and dysplastic processes. Think before you cut. An initial differential diagnosis can be established by obtaining a complete history after performing a thorough physical examination. These preliminary data obtained will influence the diagnostic tests ordered and the eventual choice of incisional or excisional biopsy.

Case 1A
This 27-year-old Chinese female clerk was blissfully unaware of the huge swelling in the anterior floor of her mouth until her well-informed dentist Dr. C advised her to see me for further management.

a. What is wrong with the floor of her mouth? (Fig. 3a).
b. What anatomical structures are involved with the swelling?
c. Will she have any distinct functional problem in speech and mastication?
d. We decided to perform an excisional biopsy (Fig. 3b). What is the difference between an incisonal biopsy and an excisional biopsy? Which important possible post-op complication must your patient be aware of and warned about before proceeding?

e. Why is the incision shaped as in Fig. 3a?

Describe the lesion in toto as shown in Fig. 3c.

a. How can you tell that this is an odontogenic cyst or tumour? (Fig. 3d).
b. What structures must you avoid when operating on the buccal mucosa of the cheek? (Fig. 3e).
c. What structures can you discern in the surgical bed after the excision of the tumour? (Fig. 3f).
d. The excised lesion Fig. 3g is probably not an aggressive non-infiltrative tumour. What signs indicate that this lesion is probably of infective origin? Why?

e. Fig. 3h is the extra-oral presentation. Describe what you see and correlate it with your diagnosis.

a. What do you think the problem was and what did we do to achieve a cure?

Case 1B
This 18-year-old Chinese female student was worried about the increasing asymmetry of her face (Fig. 3i). She complained about this fluctuant mobile lump on her (L) cheek which had gradually increased in size.

a. How can you tell that this is so in Fig. 3j?
b. Again we decided to do an excisional biopsy. What are the types of mid-line swellings that you must consider in the differential diagnosis?

Case 1C
This 32-year-old Chinese householder presented around Chinese New Year 2004 for a rapidly enlarging swelling which started some months back.

a. The facial asymmetry is highly obvious. Describe what you see? (Fig. 3k).
b. The intra-oral appearance looks bleak. Why? What features indicate its non-aggressive nature?

c. The growth was enucleated (Fig. 3l). Are you likely to encounter any vital structures in the maxilla?
d. The excised lesion Fig. 3m is quite typical. What can you see?

Case 1D
This 60-year-old Chinese businessman has had a growth in the (L) maxilla for the last five years.

a. What features in Fig. 3n suggest a benign growth in the (L) maxilla?
b. Fig. 3o (mirror image appearance—actually the growth on the (R) side) has a unique feature that is highly obvious. What is it? Which tooth is the culprit?
c. The X-ray appearance confirms the benign nature in contrast with Fig. 3p. What features indicate its non-aggressive nature?

d. The growth was enucleated (Fig. 3q). Are you likely to encounter any vital structures in the maxilla?
e. The excised lesion Fig. 3r is quite typical. What can you see?

Case 1E
This 74-year-old Malay housewife complained of trismus, pain of (L) jaw and inability to eat plus difficulty in swallow- ing saliva.

a. What can you see in Fig. 3s? What signs indicate that this is probably not an aggressive growth but inflammatory in nature?
b. Fig. 3t is the extra-oral presentation. Describe what you see and correlate it with your diagnosis.

c. The intra-oral appearance Fig. 3u confirms that this lesion is probably of infective origin. Why?
d. The X-ray view (Fig. 3w) is highly informative. What can you see? How does the appearance of the mandibular bone explain your findings in Fig. 3v and Fig. 3w?

What are those multiple radiopaque lines?

e. After one month of conservational treatment, the patient was cured. Fig. 3y (intra-oral appearance) confirms this. What do you think the problem was and what did we do to achieve a cure?

The rationale for putting forward cases 1A to 1E is to help readers achieve some skills in narrowing down the identity of a lesion from differential diagnosis. How would you establish a differential diagnosis? (Hint: three main steps.)