



An introduction to oral surgery for DCPs

Author information

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Zahra Yasen¹ describes the range of procedures carried out and patients treated in a hospital oral surgery department.

When most people think about oral surgery, they assume that the majority of the day would be spent carrying out dental extractions. While extractions are the bread and butter of our daily practice, the oral surgery department deals with a large variety of patients and procedures. This is particularly true in hospitals where oral surgery is also combined with maxillofacial services.

Dental extractions

For routine dental extractions, our patients range from newborn babies with mobile neonatal teeth, to elderly patients with complex medical histories and a five page long repeat prescription. Although routine extractions can be performed in the dental surgery, there are situations where it is deemed safer or more appropriate to refer to a specialist.

Anxiety

Anxiety is a very common reason for referral, as most oral surgery services will have the facilities to offer sedation (inhalational or IV) or general anaesthesia (GA). In particular, we receive many paediatric referrals for dental extractions under GA, as compliance in children is much more difficult. IV and inhalation sedation are often carried out on the oral surgery department. Some of the dental nurses are trained in sedation as well as immediate life support, and are responsible for monitoring the patient's vital signs during the sedation appointment. This leaves the dentist free to concentrate on the procedure.

Medical issues

We are all familiar with bleeding risks associated with extraction, particularly if the patient is taking anti-coagulant medication

like Warfarin or Rivaroxaban, or if they have bleeding disorders. Although some of these patients can be treated in practice, it is often safer to refer into hospital if they are taking multiple medications or have an unstable medical background. There, blood tests can be carried out, platelet transfusions can be arranged pre-operatively if necessary, and the hospital dental team are more experienced in managing excessive bleeding. In some cases, liaising with another speciality might be necessary, such as with oncologists when we treat patients who are undergoing cancer therapy. A hospital environment can also be safer for patients with issues like epilepsy and heart problems, who are at risk of medical emergency. Some patients with medical or behavioural issues may be unsuitable for treatment under local anaesthetic, so they can be treated under sedation or GA in a theatre setting.

Surgical removal

Sometimes extractions are deemed too difficult to be carried out in practice, either because they are beyond the scope of the general dentist or because specialist equipment is needed. This may include teeth which have broken down beneath the gum line, teeth that are partially erupted but impacted (such as wisdom teeth), or teeth that are unerupted (such as ectopic canines). These procedures involve raising a 'flap' in the gingiva to expose the tooth, using a surgical drill to clear bone and cut the tooth into smaller sections, then elevating the tooth. The gingiva is repositioned and secured with sutures.

Some patients will require more complex procedures, such as removal of an infected plate in the jawbone, treatment of a cyst, or retrieval of tooth root from the sinus. Generally, all procedures follow the same structure of raising a gingival 'flap', removing the source of infection and securing the gingiva back in place using sutures.

Surgical exposure

We receive referrals from orthodontists for exposure of teeth, most commonly ectopic canines. This again involves exposing the tooth by raising a gingival 'flap', and clearing away bone over the crown of the tooth. If the tooth is superficial, we may decide to cut away the gingiva overlying the tooth, and place a dressing plate with a eugenol-based dressing to protect the area and prevent the gingiva from growing back over the tooth. If the tooth is positioned deeper, we may attach a gold bracket with a chain to it. The tooth can then

be covered back over with the gingiva, making sure that the gold chain is left exposed so it can be used to guide the tooth into position by the orthodontist.

Apicectomies

If a tooth has already been root filled or has extensive restorative work, but is showing signs of periapical infection, the dentist may ask us to perform an apicectomy as an alternative to re-root canal treatment. This involves exposing the tooth surgically by raising a flap, removing bone over the root apex, clearing infection tissue and removing the end of the root using a surgical drill. A few millimetres of gutta percha is removed with a bur, then a material called MTA [Mineral Trioxide Aggregate] is placed into the end of the root canal to seal it.

Clinics

As well as assessing patients for surgical procedures, we see patients who require management for many types of conditions on our clinics. A large proportion of our patients suffer from various types of facial pain, ranging from burning mouth syndrome, to neuralgia (nerve pain), to temporomandibular joint dysfunction (TMJD). We can offer patients reassurance, investigations into the underlying causes, and management with medications or injections such as steroids or botulinum toxin. Being based in hospital means that we have access to other specialities for their input with patients, such as ENT, rheumatologists, or pain specialists.

A&E

In the hospital, emergencies are referred from A&E on a daily basis. This often involves

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Biopsies

Patients are referred in for assessment of lesions that have been noticed in or around the oral cavity. This is often done as an incidental finding by dentists, as part of a soft tissue exam which should take place every check-up. Examining the lesion can give us a good idea as to what the lesion is likely to be, but a definitive diagnosis can only be made if a sample of the tissue is sent to be looked at under a microscope. We usually carry out two types of biopsy:

Incisional biopsy

This involves removing a small piece of the abnormal tissue from the lesion. A decision on treatment can then be made once the diagnosis is known.

Excisional biopsy

This involves removal of the whole lesion and is typically carried out on smaller lesions or on lumps or swellings. Further treatment is usually not needed.

treating patients with dental abscesses, facial lacerations, or facial bone fractures. While some cases can be managed on the oral surgery department, such as suturing lacerations or draining abscess under local anaesthetic, others need to be referred to a maxillofacial unit for procedures such as repair of fractures or drainage under GA.

Despite the long and difficult procedures, the often complex patient management, and the heavy workload, oral surgery is a very rewarding speciality to work in. Patients are often very grateful to be seen as they have been in pain for some time and are unable to be managed in practice. The variety of cases that we see including the additional referrals through A&E mean that the workload is always diverse and interesting for dentists and dental nurses alike.

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