

Extraction of Upper Back Teeth: Oro-Antral Communication Risk

Oro-Antral Communication (OAC)

This is a communication (hole) between the mouth and the air-filled space either side of the nose inside the cheekbones. This space is called the maxillary sinus or maxillary antrum.

This sometimes happens when an upper molar, wisdom or premolar tooth is extracted. It can also occur when trying to retrieve a fragment of tooth root that may have broken off during an extraction. As a result, liquids move from the mouth into the sinus and out through the nose.

If left untreated it can form what is called an "oro-antral fistula" (OAF). If left untreated the maxillary sinus can become infected. This is called maxillary sinusitis.

Special Precautions Following Extraction

If an oro-antral communication is very small, it may not be noticeable to you or the dentist and will often resolve and close on its own by following special precautions:

For 10 days following extraction of an upper back tooth:

- No blowing your nose or sneezing with pinched nostrils.
- No smoking.
- No sucking through straws.
- No blowing up balloons, or air mattresses.
- No playing a wind or brass musical instrument.
- No snorkelling or scuba diving.
- Keep to a soft diet and avoid any sharp /hard foods that may interfere with the healing wound.





Surgical Closure of OAC or OAF

If the oro-antral communication does not resolve, a surgical procedure is needed to close the hole. The aim of the dentist is to try to cover the hole in the gum, which goes up into the sinus. This helps the tissues to heal in such a way that a layer of bone and gum will form a permanent barrier that will separate the mouth from the sinus.

In most cases this can be done by mobilising some of the gum from alongside the site of the tooth extraction and some of the sulcus skin (the skin of the mouth that joins the base of the gum to cheek).

This is a painless procedure and is carried out under local anaesthetic. You will have some stitches placed to hold the gum in its new position to cover the hole whilst it heals underneath. These stiches will be removed if they haven't otherwise dissolved in 14 days. As with all surgery, there WILL BE some pain, bruising, swelling and possibly temporary or permanent numbness to your cheek or nose.

This surgery is effective in 95% of cases, although a small minority may require revision surgery. If the defect is very large and/or a piece of root becomes loose and floats about in the sinus then the sinus will have to be explored and washed out. The defect will be repaired with fat from the inside of the cheek, skin from the roof of the mouth or a synthetic membrane. Such procedures normally are normally carried out under general anaesthetic (asleep) in hospital.

Postoperative Medication

Bacteria from the mouth may contaminate the wound or the sinus; therefore, your dentist may prescribe the following medication:

• A course of an appropriate antibiotic.





- A nasal decongestant-such as Ephedrine, (to be used with caution with patients that suffer from cardiovascular disease, hypertension, diabetes and who are being treated for depression with medication).
- Steam inhalations an aromatic substance such as menthol or eucalyptus should be used. Usually one teaspoon to be added to 500mls of hot water in a bowl with the head 6-12 inches away and a towel placed over the head for maximum inhalation. This should be done for 5-6 minutes and repeated every 6 hours. This will moisten the airways and prevent crusting of blood and mucus in the sinus.

You will also need to continue with the **special precautions** listed above while the wound is healing. Your dentist will review you regularly to ensure the hole has closed over.

