
PATIENT INFORMATION

Coronectomy

What is a coronectomy?

Coronectomy is the term used to describe the partial removal of a tooth. It means that the top part of a tooth (the crown) is removed whilst the root is left in place. Your surgeon may recommend this procedure when the removal of both the crown and root could cause damage to the nerve that supplies feeling to the lower lip and chin.

Why do a coronectomy rather than a normal extraction?

Most coronectomies are done on impacted, partially erupted wisdom teeth – the reasons why these teeth might need removal are described in the **Removal of Wisdom Teeth Information Leaflet**. The nerve that supplies feeling to the lower lip and chin runs through the lower jawbone, close to the roots of the wisdom tooth. In some cases the nerve may be very close indeed and removal of the whole tooth could cause damage to the nerve. If this happens, you might be left with numbness of the lower lip and chin or rarely a permanent feeling of burning or intense pain instead of numbness. This could affect your quality of life greatly.

If your surgeon thinks there is a high risk that removal of the whole tooth could cause these problems, they may suggest a coronectomy. The aim is to remove the part of the tooth causing problems (the crown) whilst leaving the root in place. As the root is the part of the tooth closest to the nerve, leaving it undisturbed reduces the risk of nerve damage.

How will my surgeon assess the risk of nerve damage?

In most cases your surgeon can assess your tooth using normal x-rays. These provide a 2-D (flat) view of the tooth and in most cases give

enough information for your surgeon to know if the whole tooth can be removed safely.

In some cases your surgeon will want a more detailed view of the tooth and will recommend that you have a special scan. This is called Cone Beam Computed Tomography (CBCT) and is like a 3-D x-ray. With this view your surgeon will be able to see a very detailed view of the relationship between the tooth and the nerve.

Are all wisdom teeth suitable for coronectomy?

No. Decayed teeth or teeth with infection around the root tips aren't suitable for coronectomy.

How is a coronectomy done?

Your surgeon will make the area numb with an injection of local anaesthetic into the gum. A cut will be made around the tooth and the gum pulled back to expose it. A small amount of the jaw bone will be drilled away with a dental drill and a cut made in the tooth about one third of the way down from the top of the tooth. This will allow your surgeon to separate the top part of the tooth whilst leaving the root behind. The cut root surface is then trimmed and smoothed so it is below the level of the surrounding jawbone. The gum will be stitched back in place so that the root is completely covered. Surgery normally takes around 20-25 minutes.

How will I feel afterwards?

You will need to take painkillers regularly. You will be given instructions on how to care for the surgical site. The stiches are almost always dissolving stiches that will fall out in around two weeks.

Are there any potential complications?

- Although the risk of damaging the nerve is less than if the whole tooth was removed, there is still a small risk of permanent nerve damage.
- Sometimes the root becomes loose during the coronectomy. If this happens the root has to be removed, just like a normal extraction.
- Usually the root remains buried in the jawbone and never causes any problems. In some cases the root can move and come through the gum into the mouth. This piece of root may need to be removed. The risk of nerve damage is extremely low now because the root has moved away from its original position close to the nerve.
- If the buried root becomes infected but hasn't moved, it will need to be removed. The risk of nerve damage here is the same as if the whole tooth were extracted in one go at the time of the first surgery.