



This leaflet has been designed to explain what endodontic surgery (apicectomy) involves and it contains answers to many frequently asked questions. If you have any other questions that the leaflet does not answer, or if you would like further information, please ask us.

What is an apicectomy?

An apicectomy is an endodontic surgical procedure which is performed to treat infections around the roots of teeth when root canal (re)treatment has already been attempted and failed to eliminate the infection.

What is involved in this procedure?

This minor surgical procedure is carried out under local anaesthetic and involves:

- raising a flap of gum around the tooth being treated
- some bone removal to reach the diseased tissues
- location of the root end(s)
- cutting off of the infected root end(s) (usually 2-3 mm)
- treatment of residual infection in the root by cleaning and sealing the root end(s)
- closure of the gum with stitches which will need to be removed in 5-7 days
- an x-ray will be taken following completion of the procedure

The diseased tissue removed from the root end(s) will be sent to the laboratory for investigation and you will be informed of the findings at a subsequent visit.

Will the procedure be successful?

Failure despite endodontic treatment is a possibility and this may become obvious either immediately or years later. If the apicectomy is not a success then the tooth may need to be extracted. The success rate ranges from 44-95% depending on the individual situation.

If a fracture line is found on the root during the procedure, there is no option but to extract the tooth. However, if this is a front tooth, this will be organised on a separate visit to allow a temporary replacement to be made.

What are the risks involved with this procedure?

The risks associated with endodontic surgery include, but are not limited to:

- pain and discomfort during and after surgery
- damage to the sinus cavity. Breaking through the sinus lining requires certain precautions that you will be advised of if this occurs.
- altered sensation/numbness if the nerves in the region are stretched or damaged. This may be temporary or permanent
- post-operative pain, swelling, bruising, bleeding and infection.

As the gum heals it may shrink back a little and if there is a crown on your tooth the margin of the crown may become visible in your mouth

This leaflet is available online at http://www.ucc.ie/en/dentalschool/patients/