



Apical granuloma

This leaflet has been designed to improve your understanding of your condition and contains answers to many of the commonly asked questions. If you have any other questions that the leaflet does not answer or would like further explanation, please ask.

What is an apical granuloma?

When a tooth dies, it may become very slightly tender to the touch but otherwise will show little in the way of symptoms. The non-vital tooth may then develop a low-grade infection around the root tip (chronic apical periodontitis), which often follows an acute infection that hasn't been properly drained or healed.

Chronic apical periodontitis is a typical chronic inflammatory reaction. The infection is trapped by inflamed cells and granulation tissue (clusters of small blood vessels and tissue) grows into a rounded mass at the root tip. This is known as an apical granuloma.

Why does it happen?

Despite a lack of symptoms, there is no spontaneous healing due to the persistence of the infection from the dead tooth. The granulation tissue continues to grow around the root tip and the surrounding bone is broken down, making room for more granulation tissue to grow into. If left to continue, it can lead to the formation of a cyst.

The apical granuloma will usually remain restricted in the bone but may result in a pus-forming abscess on the surface – known commonly as a 'gum boil'.

Possible complications if an apical granuloma is left untreated

- Peri-apical granuloma formation (infection of the root apex).
- Radicular cyst formation (a cyst may form at the root of the tooth).
- Suppuration and sinus formation (pus draining through the gums, or the skin).

How is it treated?

Healing can only happen following removal of the tooth, adequate endodontic (root canal) treatment of the tooth or removal of the root tip of the tooth (apicectomy). This depends on the condition of the tooth and the size of the infection.

Contacting us

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Please ask if you need this information in another language or format.

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