

Cracked Tooth Syndrome

What is cracked tooth syndrome?

Cracked tooth syndrome is when a tooth has a **suspected crack**, but no part of the tooth has yet fractured off. It is a very common problem which most frequently occurs in premolars and molars (at the back of the mouth). A crack under consistent chewing can lead to **nerve damage within the tooth ('devitalisation'), fracture and tooth loss if untreated**. It can affect teeth with large fillings (which are more brittle by default) and is particularly prevalent, but not limited to, patients who clench their teeth at night. Cracked tooth syndrome can be secondary complication of a visibly cracked tooth with no symptoms.

What are the symptoms?

Cracked teeth can display no symptoms at all, until the crack has found its way close to, or into the nerve. Symptoms usually present as pain or sensitivity when chewing (putting pressure down on a tooth) and also, on releasing after chewing something (rebound pain). It is often difficult for the patient to know which tooth it is exactly originating from. There can sometimes be related temperature sensitivity (but not always). **The sensation does not always occur every time we eat something and can sometime only be felt once or twice in a month.**

This sensation is usually short lived i.e. only when chewing/release. However, if left untreated, the crack can slowly propagate into the nerve within the tooth, causing increasing levels of pain which can persevere after the initial chewing pain, even for minutes at a time. This can lead to 'devitalisation' of the nerve (inflammation within the nerve resulting in nerve death/necrosis and subsequent infection- dental abscess). This nerve damage usually exhibits itself as constant toothache and swelling thereafter.

How is it treated?

Research and studies have shown that the most predictable way of preventing a crack from spreading into the tooth is to place a crown on it. This can significantly reduce the risk of a tooth splitting (leading to tooth loss)- although as with any medical or dental treatment this risk is not brought down to zero. It is not advisable to remove and replace a filling within a tooth with a suspected crack as this can lead to further propagation of the crack into the tooth structure.

We always notify patients that there is still a small risk of future nerve damage within the tooth even after a crown is placed (sometimes years afterwards). In this event, we remove the crown, root treat the tooth and replace the crown. Unless the symptoms point to devitalisation of the nerve (as above), we do not root treat cracked teeth by default: only if the symptoms are severe enough to warrant it.