CRACKED TOOTH SYNDROM

Your Guide to Cracked Teeth

With their more sophisticated procedures, dentists are helping patients to keep their teeth longer. People are living longer and exposing their teeth to many more years of crack-inducing habits, such as clenching, grinding, and chewing on hard objects. These habits make our teeth more susceptible to cracks. Some cracks are not a problem and can exist for years without any negative consequences. Other cracks, especially those next to fillings, can eventually cause a portion of your tooth to break away.

Cracked teeth show a variety of symptoms which includes erratic pain when chewing, possibly with release of biting pressure, or pain when your tooth is exposed to temperature extremes. A common complaint is that of a quick, sharp pain at impact, when you eat something firm. This pain usually tells you to chew elsewhere quickly! In many cases the pain may come and go and dentists may have the difficulty of locating which tooth is causing the discomfort.

Why does a cracked tooth hurt?

Inside the tooth, under the white enamel and a hard layer called the dentin, is the inner soft tissue called the pulp. The pulp contains blood vessels, nerves, and connective tissue. When the outer hard tissues of the tooth are cracked, chewing can cause movement of the pieces and the pulp can become quickly irritated. When biting pressure is released, the crack can close quickly, resulting in a momentary, sharp pain. Irritation of the dental pulp can be repeated many times by chewing. Eventually the pulp will become damaged to a point where it can no longer heal itself. The tooth will not only hurt when chewing but may also become sensitive to temperature extremes. Extensive cracks can lead to infection of the pulp tissue, which can spread to the bone and gum tissues surrounding the tooth.

Types of Cracks:

Craze Lines:

Craze lines are tiny cracks that affect only the outer enamel. These cracks are extremely common in adult teeth. Craze lines are very shallow, cause no pain and are no concern beyond appearance.

Fractured Cusp:

When a cusp, the pointed part of the chewing surface, becomes weakened, a fracture sometimes results. The weakened cusp may break off by itself or may have to be removed by the dentist. When this happens, the pain will usually be relieved. A fractured cusp rarely damages the pulp, so root canal treatment is seldom needed. The tooth will usually be restored by your dentist with a full crown.

Cracked Tooth:

This crack extends from the chewing surface of the tooth vertically towards the root. Sometimes the crack may extend below the gumline and in severe cases into the root. A cracked tooth is not completely separated into two distinct segments. Because of the position of the crack, damage to the pulp is common. Root canal treatment is frequently required to treat the injured pulp. Your dentist will then restore your tooth with a full crown to bind and protect the cracked tooth. Even with high magnification and special lighting, it is sometimes difficult to determine the extent of a crack.

Split Tooth:

A split tooth is often the result of the long term progression of a cracked tooth. The split tooth is identified by a crack with distinct segments that can be separated. A split tooth can never be saved intact. The position and extent of the crack, however, will determine whether any portion of the tooth can be saved. In rare instances, endodontic treatment and a crown or other restoration by your dentist may be used to save a portion of the tooth.

Vertical Root Fracture:

Vertical root fractures are cracks that begin in the root of the tooth and extend toward the chewing surface. They often show minimal signs and symptoms and may therefore go unnoticed for some time. Vertical root fractures are often discovered when the surrounding bone and gum tissue become infected. Treatment usually involves extraction of the tooth. However, endodontic surgery is sometimes appropriate if a portion of the tooth can be saved by removal of the fractured root.

Treatment of Cracked Tooth Syndrome

The treatment of cracked tooth syndrome varies depending on the severity of symptoms. We cannot determine the depth and direction of the fracture or crack below the surface. We often have to rely on the intensity of the symptoms to indicate the progression level of the fracture or crack. We may elect not to do treatment and to monitor the situation depending on the degree of symptoms. We may perform a diagnostic filling removal to assess the tooth for the extent of the fracture/crack. A full coverage crown is needed if the fracture line appears more extensive and the symptoms are more potent. In teeth that exhibit symptoms that are characterized by long standing consistent lingering temperature sensitivity, we often elect to perform root canal treatment prior to placing the crown.

Will my tooth completely heal?

Unlike a broken bone, the fracture in a cracked tooth will never heal. In spite of treatment, some cracks may continue to progress and separate, resulting in loss of the tooth. Placement of a crown on a cracked tooth provides maximum protection but does not guarantee success in all cases.

The treatment you receive for your cracked tooth is important because it will relieve pain and reduce the likelihood that the crack will worsen. Once treated, most cracked teeth continue to function and provide years of comfortable chewing. Talk to your dentist about your particular diagnosis and treatment recommendations. They will advise you on how to keep your natural teeth and achieve optimum dental health.

If you have any further questions please call our office at 905-508-2244.
We love to hear from our patients.