

Clinical case blog

Title: Diagnosing a Case of Cracked-Tooth Syndrome

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"Cracked tooth syndrome", also termed "split tooth syndrome", is where a tooth has incompletely cracked but no part of the tooth has yet broken off. Sometimes it is described as a greenstick fracture. The symptoms are very variable, making it a notoriously difficult condition to diagnose. The symptoms may include a "sharp pain" when biting on a certain tooth, which may get worse if the applied biting force is increased or "Rebound pain" i.e. sharp, fleeting pain occurring when the biting force is released from the tooth, which may occur when eating fibrous foods or pain when grinding the teeth backwards and forwards and side to side. Patient may also complain of a sharp pain when drinking cold beverages or eating cold foods, lack of pain with heat stimulation or pain when eating or drinking sugary substances. Sometimes the pain is well localized, and the individual is able to determine the exact tooth from which the symptoms are originating, but not always. If the crack propagates into the pulp, irreversible pulpitis, pulpal necrosis and periapical periodontitis may develop, with the respective associated symptoms.

A 43-year old female patient reported to the department of Prosthodontics and & Crown & Bridge, PGIDS Rohtak with the chief complaint of a sharp pain on chewing in the left canine. A confirmatory diagnosis of "cracked-tooth syndrome" was made based on the history of pain (typically characterized by pain when releasing biting pressure on the tooth), the "bite-test" (patient asked to bite on cotton roll) and the radiographic examination (fracture line seen on intra-oral periapical radiograph in 23) (Figure 1).