Cracked Tooth Syndrome:
An advice sheet for dentists and dental teams

A cracked tooth is an incomplete fracture when a crack runs from the occlusal surface of the tooth down towards the root without breaking apart.

### Tools of Diagnosis
- Clinical examination
- Clinical tests
- Radiographs
- Cone beam computed tomography
- Tooth slooth ®
- Transillumination

### Aetiology
- Previous cavity preparation
- Obturation forces
- Tooth morphology
- Cervical tooth surface loss
- Parafunction
- Trauma
- Psychological stress

### Prevention
- Avoid chewing hard objects such as fingernails, pen tops and other habits.
- Avoid clenching or grinding their teeth.
- Use retainers or mouthguards to protect teeth during sleep.
- Reduce or avoid if possible psychological stress that increases clenching or grinding of teeth.
- Wear a mouthguard or face shield during sports.
- To seek professional psychological support if required.
- Undergo evaluation and correction of occlusal interference.
- Attend regular dental appointments to allow for the examination of occlusal and contact points regularly.

### Treatment
- Relieve pain
- Splint or bruxism appliance
- Restoration
- Prosthesis such as a crown
- If subgingivally (inside the supracrestal tissue attachment)
  - surgical crown lengthening (+/- laser)
  - orthodontic extrusion
- Surgical premolarization or hemisection
- Extraction
- Referral for psychological support

### Signs and Symptoms
- History of pain on chewing
- Sensitivity from thermal stimuli
- Sensitivity to sweet food or drinks
- Inflamed or infected gingivae
- Localized periodontal pocketing
- Bruxism
- Trismus/aching facial muscles
- Temporomandibular joint dysfunction
- Lost/displaced restorations
- Abrasion
- Wear facets
- Tooth movement or mobility

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**Crack of Enamel**
- Vertical Crack

**Oblique Crack**
- Crack of Dentin

**Crack extending to Pulp**
- Crack extending to Periodontum