

Acute Dental Pain

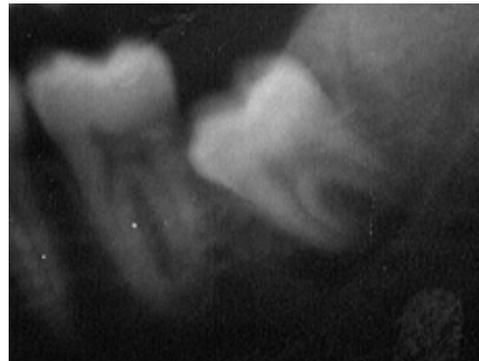
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Dental disease of the hard tissues (caries of enamel, dentine and cementum) and soft tissues and supporting bone (gingivitis / periodontitis) are the recognised as the most common diseases to afflict the general population. These conditions are largely diagnosed and treated by dental practitioners by history, dental clinical examination and radiographs. However, several conditions (marked by an *) are worthy of further comment for the pain management clinician as they can be of an acute but recurrent nature and thus may be referred to a pain management clinic. A brief summary of the common acute dental pain states is given.

Dental pulpitis (“toothache”). Typically characterised by an aching or throbbing pain often as a result of dental caries or a leaking dental restoration. It is worse following food or fluid intake. The pain may be sharp following pressure applied to tooth cusps where the causal factor is a crack in the tooth. Ongoing pulpal inflammation usually leads to an acute abscess (very painful throbbing quality with associated swelling in the jaw) is indicative of an acute infection.

Gingivitis and periodontitis. Gingivitis (bleeding gums) is usually painless while periodontitis may exhibit an episodic, low intensity, dull pain.

Pericoronitis. Infected tissue usually associated with an impacted or erupting lower third molar (wisdom) tooth. the adjacent radiograph (xray) shows an impacted wisdom tooth that has caused periodic pain due to infection. There has been some bone loss behind the crown of the wisdom tooth that indicates a history of infection.



Premature contact (or ‘high bite’). Characterised by a sharp (then dull after a period) pain due to a recent tooth restoration that is ‘high’ compared with the normal occlusion when biting together.

Exposed cementum or dentine. The tooth root surface (a thin layer of cementum overlaying dentine) is exposed from excessive / incorrect toothbrushing. There is tooth sensitivity from cold fluids /air.

Alveolar osteitis (“dry socket”). It occurs several days after a tooth extraction when the blood clot in the socket is lost through mechanical means (excessive and vigorous rinsing) or salivary based enzymic (fibrinolytic) factors. Patients complain of a deep ache in the extraction socket.

***Post endodontic surgery pain.** Severe aching pain following endodontic treatment (root canal therapy or apicectomy). While the majority of patients improve over time (weeks), a few will develop a chronic (neuropathic) pain state. This is expanded on substantially in the neuropathic orofacial pain section in this module.

***Maxillary sinusitis.** Recurrent maxillary sinusitis may cause widespread pain in the maxillary teeth. The pain has a continuous aching quality and is usually made worse by bending forward. It can mimic the maxillary sinusitis-like symptoms in TMD or neuropathic pain.