Key Learning Points from "Dental Emergencies in the ER"

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Royal Columbian Hospital Rounds- September 25, 2019

1) **Key physical examination** findings that can help determine the origin of dental pain in the ER patient
    - **Palpate muscles of mastication**: localized tenderness over the masseter or temporalis especially at origin/insertion can indicate TMJ pain that might benefit from a night guard
    - **Percussion test:** tapping teeth with a blunt instrument ie tongue depressor can identify the "hot tooth" because it compresses the tooth against the abscess below it
    - **Pulp/Ice test**: place cold ie. ice on a tooth on the outside (buccal) area. Immediate and prolonged response means the pulp is still vital and pain is from periodontitis. No response = necrotic tooth. * ***Periapical abscesses occur in the presence of a necrotic tooth.***
    - **Mobility Test**: place fingers on a tooth and move it bucally and lingually. Large amounts of movement + pain= periodontal pain. Sometimes this test can make pus from a periapical abscess visible to confirm the diagnosis
    - **Palpation test**: starting on the normal side (to establish a baseline) place the apex of your finger at the apex of the tooth . This can reveal surrounding tenderness/swelling.

2) **The source of dental pain is not always obvious at first glance.**
    - Severity of visible caries is often not a predictor of the severity of pain.
    - Normal appearing teeth can still elicit 10/10 "hot tooth" pain especially if porcelain caps or fillings are in place
    - In many cases, dental X-rays are required to definitively identify the source of pain. ED role should largely be to consider local anesthetic (esp overnight) and then send to the dentist the next day. If daytime hours, just send to the dentist as local can make identification more difficult for the dentist.

3) **Undifferentiated dental pain without overt infection/abscess DOES NOT need antibiotics**
    - Acad Emerg Med. 2004 Dec;11(12):1268-71
    - No significant difference in risk of infection (9 vs 10%) or pain scores

4) **Periapical abscesses are the most common source of odontogenic pain**
    - Draining visible "gum" fistulas in the ED does not have a huge impact on outcome or pain. A dentist still needs to do a root canal to clean out the source of infection & necrotic tissue
    - ED Management: prescribe the patient an antibiotic (penicillin is still best) + analgesia
    - Some general dentists will perform I&Ds or treat the infection source with extraction/root canal while the tooth is painful, but this is highly practice dependent, and some will suggest referral to an oral surgeon.

5) **If your patient with a dental infection has significant facial swelling they need to see an oral surgeon to drain the abscess NOT a general dentist**
    - Try to refer directly to an oral surgeon in these cases to avoid another delay

- ED treatment: IV Ceftriaxone + po Metronidazole, analgesia, and Rx Chlorhexidine (Peridex 0.12%) 15 cc BID to swish
- If no facial swelling, they can see a general dentist with po Abx, analgesia, & chlorhexidine

6) **Pericoronitis=** pain due to infection & inflammation secondary to the eruption of wisdom teeth/molars
   - ED management: refer to dentist or oral surgeon, po Abx, & Rx Chlorhexidine

7) **Avulsed Teeth:**
   - Replant ASAP! 90% success if <30min, ~5% if >2h
   - Insert slowly into socket and hold pressure for 10-15min then send to dentist. No need for splinting/stabilization in the ER but tell patient not to eat or drink
   - No re-implantation for primary teeth
   - Don't use Cavit or other material on dental fractures unless for purely cosmetic reasons. If dental pain is present, you increase the risk of trapping in bacteria & saliva and making it worse