

DENTAL EMERGENCIES IN PAEDIATRIC DENTISTRY

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Introduction

- Most oral emergencies relate to pain, bleeding, or orofacial trauma and should be attended to by a dental practitioner.
- However, in the absence of access to dental care, a medical practitioner may be called upon to help.
- Jaw fractures require the attention of maxillofacial surgeons.

Dental Pain

- Pulpal pain is spontaneous strong, throbbing, exacerbated by temperature and outlasts the evoking stimulus.
- Localization of pain is poor and it radiates to the ipsilateral ear and temporal region.
- Mx; Anaesthetics, Refer to a dental practitioner for either RCT or XLA

Odontogenic Infections

- Periapical Periodontitis
 - Pain is spontaneous, severe and persists for hours. It is well localized and exacerbated by biting.
 - Adjacent gum is tender.
 - Abscess (gum boil) and sometimes with facial swelling and fever.

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- Fascial space infections
 - These are fortunately rare.
 - They threaten the airway.
 - Refer patient to specialist.
 - In the absence of a specialist perform IND and give appropriate antibiotic and anaesthetic.
 - Advise the patient to seek dental advice for treatment of the causative tooth.

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- Chronic abscesses, however, may be asymptomatic apart from a discharging sinus.
- Rarely this may open on the skin.

Bleeding

- Most oral bleeding results from gingivitis or trauma or tooth extraction but if prolonged the patient should be evaluated for bleeding tendency.
- Tooth extraction (XLA):
 - After XLA the socket normally bleeds for a few minutes then clots.

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- If the socket continues to bleed, the patient should be asked to bite on a gauze pad for 15 to 30 minutes.
- If it continues a haemostatic agent eg. surgical should be placed in the socket.
- If bleeding continues then the socket should be sutured and consideration given to bleeding tendency.

Surgical Complications

- **Post extraction pain:**

- Pain & swelling is common after XLA but eases off after a few hours.
- Pain from complex procedures could last longer and controlled by anaesthetics.
- If pain persists then refer to dentist to exclude a pathologic disorder (eg. Dry socket or iatrogenic jaw fracture).

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- **Infection**

- Localized osteitis (dry socket) occasionally follows tooth extraction especially lower molar.
- After 2 or 4 days there is increasing pain, halitosis, an empty socket and tenderness.
- Clinician should rule out RR, jaw fractures, osteomyelitis especially if there is high fever.

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- Infection is treated by irrigation with warm saline or aqueous chlorhexidine.
- Prescribe anaelgesics and antibiotics (metronidazole).

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- **Antral complications:**
 - Tooth/root in antrum; Give the patient antimicrobial agent and nasal decongestant. Localize the tooth by radiography. Refer to Maxillofacial surgeon.

Contd.....

- Oroantral fistula: Patient advised not to blow their nose. Antimicrobial agent and nasal decongestant prescribed. Refer for primary repair.

Fractured Teeth

- Injuries to primary teeth may be of little consequence with regards to emergency care, but even seemingly mild injuries can damage successor teeth.
- Enamel # of permanent teeth requires no emergency care, but dental care should be sought later.

Contd.....

- Injuries affecting dentine should be treated as urgent. A suitable dentine lining agent can be placed onto the #ed dentine before referral to a dentist preferably on the same day.
- Fractured roots require dental advice.

Avulsed Teeth

- Avulsed permanent anterior teeth can be replanted successfully in a child, particularly if the root formation is not complete.
- Hold the tooth with the crown, rinse with normal saline and insert it into the socket.
- Splint the tooth with foil or tissue adhesive.
- Dentist should be seen within 72 hours.

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- If immediate replantation is not possible then the tooth should be placed in:
 - Isotonic fluid.
 - Cool fresh pasteurized fresh milk.
 - Saline solution.
 - Contact lens fluid.
 - If the child is cooperative the it can be carried in the buccal sulcus.

Maxillofacial Trauma

- **Dislocation or Subluxation of the mandible:**
 - Commonly caused by a blow to the chin when the jaw is open.
 - #s must be excluded.
 - Reduction is done by facing the patient, placing thumbs over the molars and applying pressure with the fingers under the chin backward and upward.

Contd....

- In case of muscle spasms the give midazolam HCL iv to facilitate muscle relaxation.
- Advice patient not to open the mouth wide.
- Recurrent dislocation is a feature of Ehlers-Danlos and Marfan's syndrome.

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- **Jaw fractures:**

- A priority in patients with maxillofacial injury is the airway.
- For middle third facial #s a maxillofacial team should be involved at an early stage because of the associated cerebrospinal rhinorrhea and ocular damage.

Dental Indications for urgent admission to hospital

- **Trauma:**

- Middle third #s
- Mandibular #s unless simple or undisplaced'
- Zygomatic #s where there is danger of ocular damage.

Contd.....

- **Inflammatory lesions and infections:**

- Cervical or facial fascial space infections.
- Oral infections in which the patients condition is toxic or severely compromised.
- TB
- Severe viral infections.
- Vesiculobullous conditions eg pemphigus and Stevens-Johnson syndrome.

Contd.....

- **Blood loss:**

- Severe or persistent haemorrhage especially in patients with bleeding disorders.

- **Others:**

- D. Mellitus under poor control.

Ludwig's Angina



Periorbital cellulitis



Unilateral submandibular cellulitis



Cervicofacial necrotising fasciitis



Facial fasciitis



Gangrenous stomatitis



END