

Oral Surgery for Children

All surgical procedures require anesthesia, if a patient properly premeditated and comfortable and if the tissues are handled gently, even extensive operations can be performed with local anesthesia. When the fears of the patient uncontrolled, when an understanding of the situation is impossible, or when the procedure is complicated, general anesthesia is indicated. It should be emphasized that no surgical procedure should be done without the permission of the parent or guardian who should have a basic understanding of what is to be done, why it is being done, and what complications can occur.

Indications for Extraction of Primary Teeth

Extraction indication:

- Indications for extraction for children are the same as for adult patient
1. Non restorable caries.
 2. Apical disease.
 3. Fractures of crown or roots.
 4. Prolong retention of primary teeth because of improper root resorption or ankylosis.
 5. Supernumerary teeth.

Radiographic surveys of teeth to be extracted are of prime importance:



1. To observe the size and contour of primary roots.
2. The amount and type of resorption.
3. The relation of roots to succedaneous teeth.
4. The extent of the disease.

Contraindications of extractions:

There are no contraindications but there is postponed of the extraction as in the followings:

1. When there is cellulites because:
 - a. It cause spread of infection.
 - b. Local anesthetic will not work.
2. In a case of uncontrolled systemic disease such as:
 - a. Heart disease they need antibiotic cover.
 - b. Diabetic patient, they should measure blood sugar before extraction.
 - c. Hemophiliac patient should hospitalized for factor VIII and IX.
3. When the child has viral infection in his mouth such as viral stomatitis so it is painful.
4. When the child allergic to anesthetic although it is very rare but the type of anesthetic should be change.

Extraction Technique for Primary Teeth

The initial steps for extracting any tooth are the same:



First having administered the local anesthetic, adequate time should be allowed for it to take effect.

The adequacy of anesthesia is tested by reflection of gingival cuff from the tooth.

The routine use of straight dental elevators as the next step has been over emphasized. In most cases proceeding with extraction forceps is preferable, smaller increments of pressure may be applied initially with the elevator.

The first force exerted, prior to any attempt to luxate the tooth, is an apical direction. The low height of contour and small undercuts need this apical force to ensure good forceps seating to prevent slippage of the beaks. Even during initial luxation there should be apical force. The maxillary primary incisors and canines have straight conical roots and can be removed easily with mesiodistal rotation. '

The primary maxillary molar region, the initial luxation force is palatal rather than buccal as is initially used with permanent maxillary posteriors. The palatal root of a primary molar is straight, relatively bulky, and less prone to fracture than the spindly, curved buccal roots. Thus the fulcrum point should be on this stronger root.

The maxillary primary molars lie toward the palatal side of the alveolar ridge. The buccal plate is full in order to accommodate the erupting permanent teeth and as a result of normal lateral growth of the maxilla, therefore it is less easy to expand with buccally directed forceps. Once some movement has been gained the primary maxillary molar is now redelivered with gradual buccal palatal motion.

Mandibular primary anterior teeth have roots that are elliptical in cross-section. These teeth usually lie labial to the crowns of erupting permanent anterior. So the initial luxation force is toward the labial. Delivery of the tooth is made with gradual labial-lingual luxation.

The primary mandibular molars are luxated initially to the buccal for similar reasons and delivered with bucco-lingual movement. A molar forceps are particularly suited to grasping the furcation area of these teeth.

Simple extraction of individual primary teeth do not usually require suturing for hemostasis, and a gauze placed under pressure for 15-20 minutes will cause a stable clot to form.

When placing the gauze is toward the buccal aspect of the teeth rather than the lingual, which might cause the patient to gag. When the bleeding is a problem, or when more than one tooth or multiple teeth in the

same area are extracted, sutures are best placed from the buccal to lingual interdental papilla.

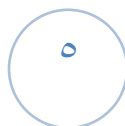
Again, it is best to use a resorbable suture to avoid a second procedure in very young anxious or physically or mentally handicapped patients. In most other situations, black silk suture is perfect because it is soft, inexpensive, easy to see in the mouth, and easy to tie.

Post-Extraction Complications:

Surgical Extraction

Tooth root or tooth tip fragments should be removed whenever possible. Any tooth root that is involved with periapical or periodontal infection must be removed, it serve as the nidus for recurring infection. Without exception, a tooth fragment that might interfere with normal succedaneous tooth eruption must also be removed. Often the apical position of a primary molar root will fracture off, and if the radiograph indicate it is curved down below the height of contour of the premolar crown, we always attempt to remove it through the existing socket using a fine root elevator. If this is not successful, we may leave the root tip alone rather than attempt the more involved surgical approach of intervention by reflecting a buccal flap and removing buccal bone to reach the root tip. This may affect the bone support of the permanent tooth.

Another case for surgical extraction is the fully erupted tooth that is unsuited to forceps extraction.



If the crown fractures or crumbles or if excessive force must be used it will be kinder and time saving if initial plan is to raise a flap, divide the roots, and remove it in sections. The forceps of primary are small in size, small blades and small handle. There is forceps for upper anterior teeth, lower primary teeth upper molar, lower molar.

Manifestation of Infection and its Management:

A child is susceptible to the same organism as an adult, the inflammatory responses are the same and the same general principles of infection control and treatment apply.

Acute Dental Infections:

An acute apical infection resulting from a non-vital or degenerative pulp may be confined to the alveolar process, may break through the cortical barrier and involve the periosteum, or may invade the surrounding soft tissue and result in cellulites. One of three results will become evident resolution, localization, or overwhelming infection. An immediate decision must be made whether to extract the tooth or treated endodontically. Fever, malaise, and oral pain result in low fluid intake and generalized acute illness, thus close observation is indicated antibiotic therapy is indicated, penicillin is the drug of choice, but erythromycin may be given and sedative.

Chronic Dental Infection:

Chronic infections are usually manifested by apical pathosis, (as shown by radiographs examination) or by

sinus tract that is draining through the alveolar process into the mouth. Antibiotic therapy is not usually necessary in the treatment of this phase, since healing is rapid after the removal of the source of infection. Gentle curettage should be done after extraction, but in the case of primary tooth, injury to the underlying tooth bud must be avoided. The path of drainage of a chronic infection will find its way through the cutaneous surface of the face especially the anterior portion of the mandible when such draining area results from an infected tooth, antibiotic therapy and extra-oral surgical closures will completely fail until source of infection is removed.

