Tonsillectomy

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Introduction

- One of the **most commonly performed procedures** in the US in children <15 yr
- entails **removing tonsil & capsule** by dissecting peritonsillar space .
- Two common indications **are sleep disorder breathing (SDB) & recurrent infections**
- Complications include **bleeding**, velopharyngeal insufficiency and dehydration
- widely performed as a **harmful traditional practice** in most parts of Ethiopia.

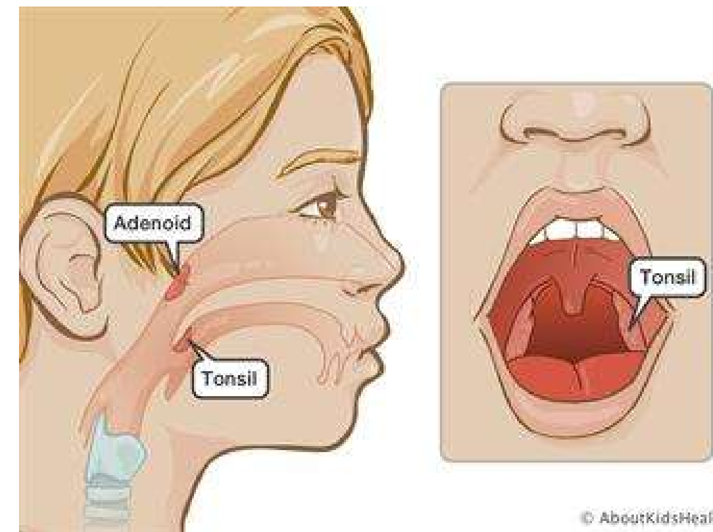
Outline

1. Anatomy
2. Indications
3. Technique
4. Postop care
5. Complications

1. Anatomy

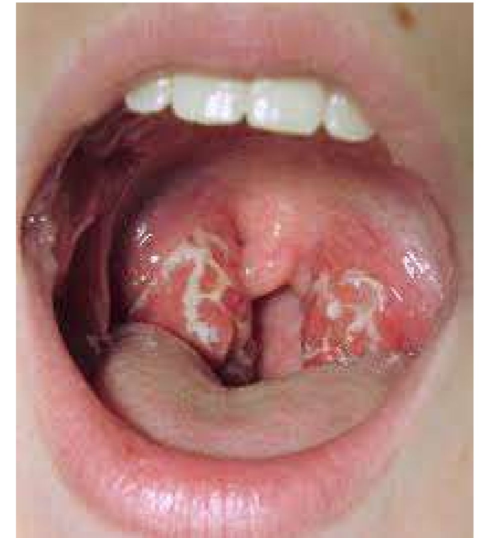
part of *waldeyer's ring of lymphoid (with tubal and lingual tonsils)*

- **Palatine Tonsils** are found bilaterally behind the tongue
    - Demarcation from surrounding musculature by capsule
    - Peritonsillar space = b/n muscle and capsule
    - Between palatoglossus lant pillar) and palatopharyngeal (post pillar) muscles
    - Glosopharyngeal nerve is deep to muscles
    - Artery (from ECA) – lingual, facial, asend pharyngeal, internal maxillary
- **Adenoid** is behind the nose



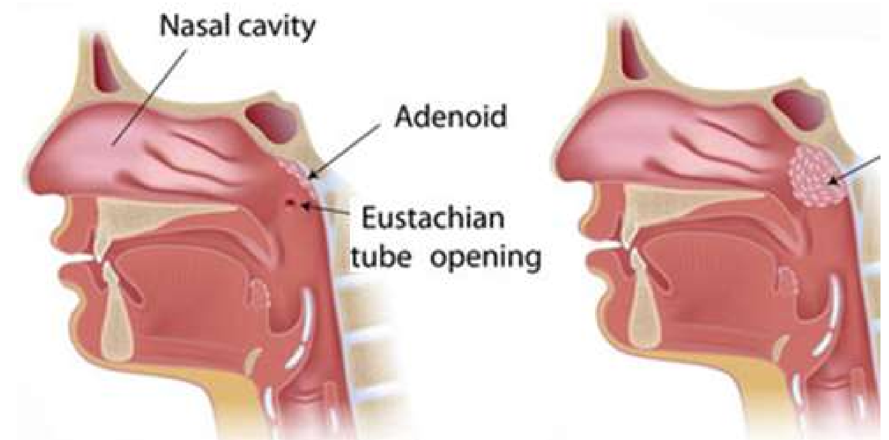
2. Indications: infection

- **Recurrent tonsillitis**
  - 7 episodes in the prior year
  - 5 episodes annually in the past 2 years
  - 3 episodes annually in the past 3 years.
  - *earlier intervention in peritonsillar abscess
- **Each infection should have documented**
  - Sore throat + one of the following
  - Fever >38.3, cervical LAP, tonsillar exudate, positive GAS



2. Indications: enlargement

- **Difficulty Breathing / sleeping**
  - hyperactivity, daytime tiredness, snoring, apnea, restless sleeping, growth retardation, poor school performance, nocturnal enuresis
  - Polysomnography - size does not correlate to the severity of SDB
- **Difficulty swallowing** / **Difficulty of speech**
- **Asymmetric enlargement (**Suspicion of malignancy)



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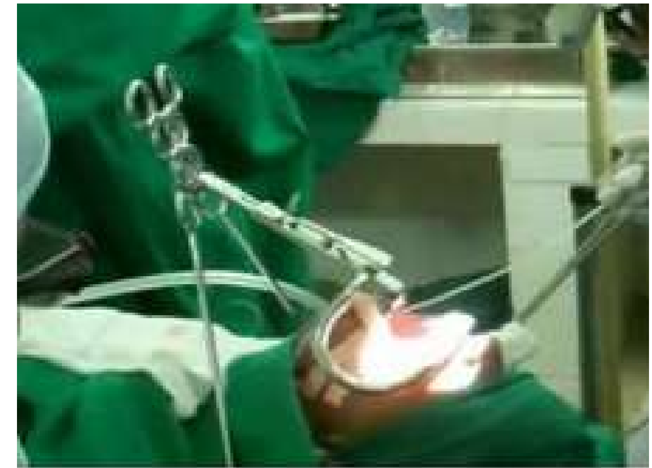
3. Technique

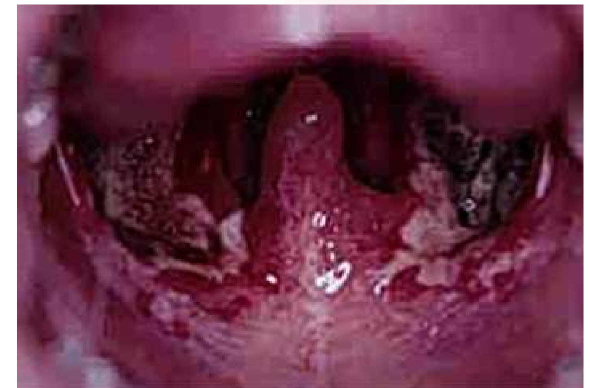
Usually last 45 min

- Under GA, tube taped at midline
- Rose’s position –head extended by pillow below shoulder
- Crowe-Davis or McIvor mouth gag is introduced
- Surgeon stands at the head of the patient



3. Technique: Tonsillectomy

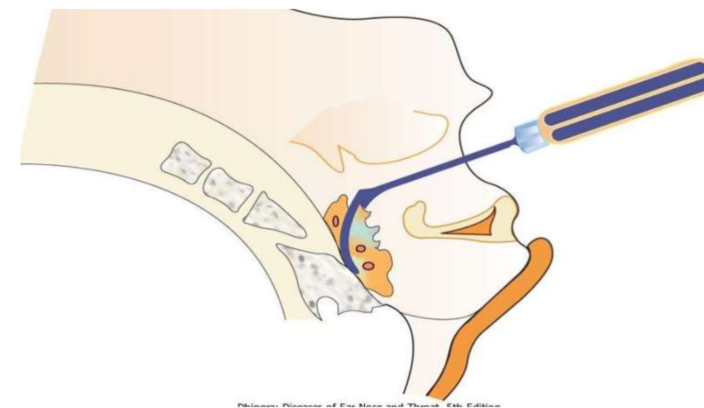
- Each tonsil is grasped with Alis forceps and medialized
- "Cold" = Incision made on memb at lateral side as it reflects from tonsil to ant pillar to dissect tonsil from peritonsillar tissue
- "hot" = using monopolar cautery (less bleeding but more pain)
- Gauze is placed in fossa and pressure is applied for few min



3. Technique : Adenoidectomy

concomitant adenoidectomy usually indicated for SDB

- <u>digital palpation of nasopharynx</u> to confirm diagnosis, asses size and push lateral adnoid toward medline
- <u>Adenoid curette introduced</u> until post border of nasal septum and is pressed backward to engage adenoid.
- <u>Sweeping movement</u> to shave off adnoid
- <u>Hemostasis</u> with gauze / cautery. Postnatal pack for 24 hr if persist



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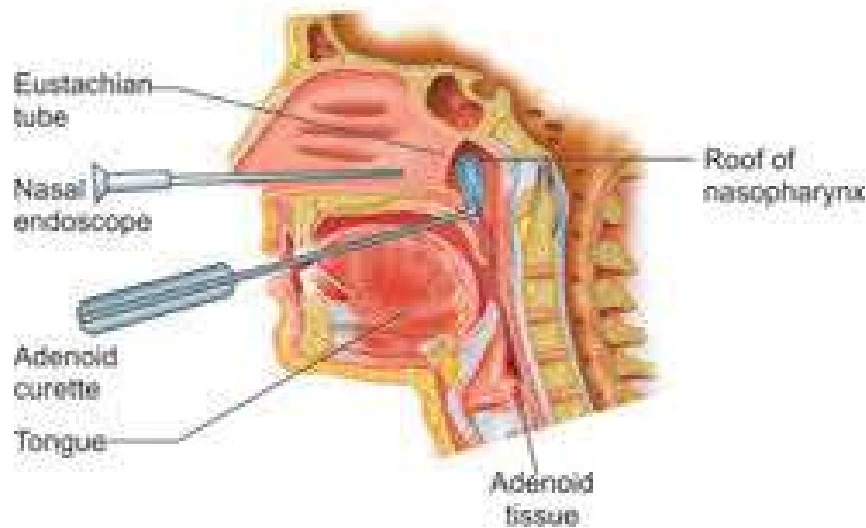

- **Nasal endoscopy assistance** offers more precise surgery

4. Postop care

- **Diet –** cold milk/ ice-cream / ice cubes give relief from pain. Encourage plenty of fluids
- **Oral hygiene -** hot water gargle 3-4 a day. Mouth wash after every feed. Nasal saline drops
- **Analgesic** – acetaminophen/ibuprofen for pain in throat, neck, jaw and ears. May last 10-14 days
- **Antibiotic** - PO or injection for 1 week
- **Hospital stay** - Day care surgery but some may spend the night
- **Activity** – limited for 2 wks (school , rough play, contact sport, travel)

5. Complications

Immediate

- Bleeding, aspiration of blood
- Facial edema
- Injury to pillars, uvula, soft palate, tongue, teeth
- Glossopharyngeal injury (transient swelling can cause otalgia, altered taste)

Delayed

- Bleeding (2.8%)
- Infection
- Scarring of soft palate/nasopharynx
- Recurrence ITonsillar remnants), Hypertrophy of lingual tonsil
- Velopharyngeal insufficiency (hyper nasal speech, nasal regurgitation)