

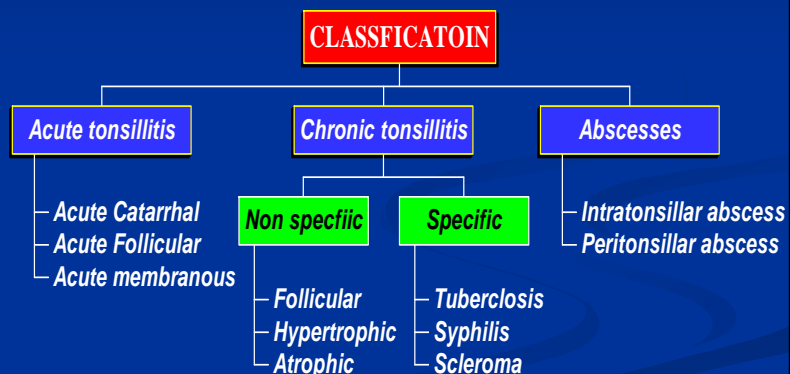
Tonsillitis & tonsillectomy

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TONSILLITIS



Acute Tonsillitis

Predisposing factors:

- Bad hygiene & overcrowding
- Diminished resistance
- Sudden change of weather
- Oral & nasal infections

Causative organisms:

■ A) Bacteria:

- Group A Beta Hemolytic streptococci
- H. Influenza, Staph., pneum. or anerobes.

■ B) Viruses:

- Aden. & Rhinoviruses, Influenza viruses, or EBV

Acute Tonsillitis

Clinical picture

Symptoms

■ General:

- Fever, headache, malaise, anorexia.
- Rigors, body aches.
- Abdominal pain, vomiting.

■ Local:

- Sore throat, Dysphagia, halitosis, salivation

Acute Tonsillitis

Clinical picture

Signs

■ Tonsils:

- A. Catarrhal T: Congested



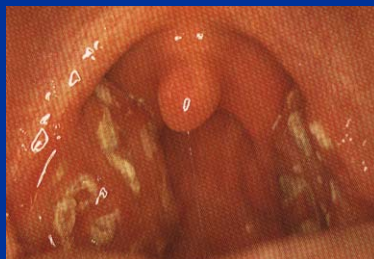
Acute Tonsillitis

Clinical picture

Signs

■ Tonsils:

- A. Follicular T: Spotted appearance



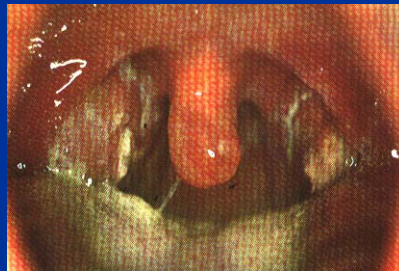
Acute Tonsillitis

Clinical picture

Signs

- Tonsils:

- A. Membranous T: Whitish yellow membrane



Acute Tonsillitis



DD of a membrane over the tonsil ??

Acute Tonsillitis

Differential diagnosis:

- Diphtheria
- scarlet fever
- Infectious mononucleosis
- Vincent,s angina
- Agranulocytosis
- Acute leukaemia
- Behcet,s disease
- AIDS

Acute Tonsillitis

Diagnosis:

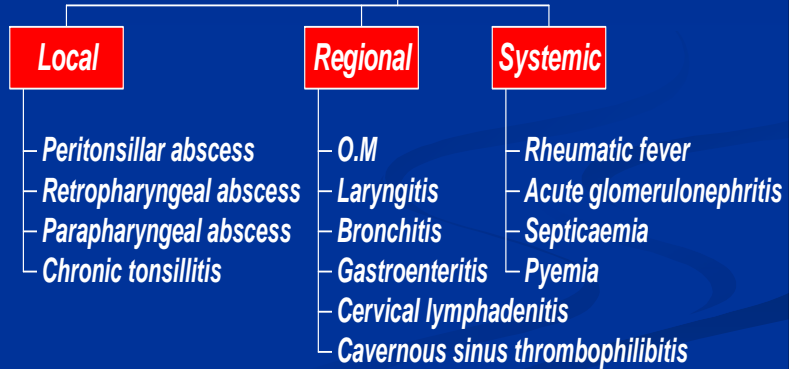
- Clinical picture
- Leucocytosis
- Culture and sensitivity

■ **Treatment:**

- Bed rest & isolation
- Soft diet & fluid replacement
- General antibiotic.
- Local gargle

Acute Tonsillitis

COMPLICATIONS



Chronic Tonsillitis

- Incidence:
 - Common in children
- Aetiology:
 - Persistence of the etiological factors of AT:
 - Sinusitis
 - Mouth breathing
 - Adenoids



Repeated attacks of AT

Chronic Tonsillitis

■ Pathology:

Chronic Inflammation mainly in:

- **Crypts:**Ch. Follicular Tonsillitis
- **Lymphoid T:**Ch. Hypertrophic Tonsillitis
- **Fibrous T:**Ch. Atrophic Tonsillitis

■ Bacteriology:

- Mixture of Strept., Staph., Pneumococci, Diphtheroid, Fungi

Chronic Tonsillitis

Symptoms

■ General Symptoms:

- General ill Health
- G.T troubles
- Septic focus manifestation

■ Local Symptoms:

- Thick voice
- Bad breath & taste
- Rec. acute tonsillitis
- Referred otalgia
- Obstructive symptoms
 - Dysphagia
 - Dysarthria
 - Snoring & OSA



Chronic Tonsillitis

Signs (Criteria)

- Tonsils are unequal in size.
- Irregular cryptal pattern
- Peritonsillar erythema (ant. pillars)
- Pressure on anterior pillar
↓
Oozing of cheesy material from crypts
- Persistent enlarged firm cervical lymphadenopathy (jugulodigastric LN)

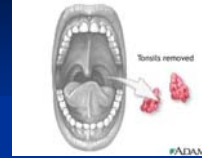


Tonsillectomy

- It is the most common major surgical procedure performed in children.
- Tonsillectomy is one of the most controversial topics in otolaryngology.
 - With regard to indications.
 - Details of surgical technique.



Tonsillectomy



Socioeconomic Issues.

- The number of adenotonsillectomies :
 - In the 1930's at approximately 1,000,000 surgeries per year.
 - Today approximately 200,000 - 300,000/ year.
- Annual expenditures for tonsil and adenoid surgery in the United States probably exceeds half a billion dollars.

TONSILLECTOMY

(Removal of the palatine tonsils)

Indications:

- Repeated attacks of A. tonsillitis (>3 times/year).
- One attack of quinzy.
- Chronic tonsillitis:
 - Acting as a septic focus e.g Rheumatic fever, A. nephritis
 - Causing regional complications e.g O.M, RTI, sinusitis
 - Causing difficulty in breathing, respiration or articulation
 - Causing foetor oris or intratonsillar abscess
- Tuberculous cervical lymphadenitis.
- Benign tonsillar tumours e.g papilloma, fibroma.
- Suspected malignancy e.g carcinoma, lymphoma.
- As a part of another operation:
 - Excision of long styloid process or branchial fistula
 - Glossopharyngeal neurectomy - UPPP

Tonsillectomy

Surgical indications:



- Recurrent acute tonsillitis.
 - 5x/year,
 - 4x/year x 2 years,
 - 3x/year x 3 years.
- Tonsillar hypertrophy with sleep disturbance.
- Peritonsillar abscess.
- Suspicious of malignancy.



TONSILLECTOMY

Contraindications

■ Absolute

- Heart failure
- Advanced pul.T.B
- Blood diseases
- Severe hypertension
- Ch.renal insufficiency

■ Relative

- Recent acute infections
- Epidemic of infectious diseases e.g polio
- Acute rheumatic fever
- Diabetes mellitus
- Asthma

TONSILLECTOMY

Preoperative preparation:

- Proper history taking.
- General examination (chest, heart, B.P).
- Local ENT examination.
- Blood investigations:
 - Hemoglobin & Hematocrit.
 - Bleeding & coagulation times.
 - Prothrombin & Partial thromboplastin times.
 - Erythrocyte sedimentation rate (E.S.R).
 - Fasting blood sugar.
 - Blood urea & creatinine.
- Urine examination for sugar & albumin.



Tonsillectomy *Surgical Indications*

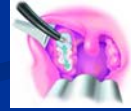


Surgical excision of the Whole palatine tonsils:

- Cold steel (may include scissors, curettes)
- Monopolar cautery
- Bipolar cautery +/- microscope
- Cryocautery
- Lasers (carbon dioxide, KTP, YAG)
- Radiofrequency Tissue Ablation

TONSILLECTOMY TECHNIQUES

- Cold knife (steel) dissection
- Electrocautery
- Harmonic scalpel
- Radiofrequency ablation
- Carbon dioxide laser: Laser tonsil ablation (LTA)
- Microdebrider
- Bipolar Radiofrequency Ablation (Coblation)



Tonsillectomy



**It Is Proper Surgical Technique
That Determines Success or
Failure.**

LASER TONSILLECTOMY
A SAFE OUTPATIENT
PROCEDURE
YASSIN S. BAHGAT, MD
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Prof. Yassin.S Bahgat

TONSILLECTOMY

Postoperative care:

- Keep the endotracheal tube until laryngeal reflex recovers.
- Post-tonsillectomy position.
- Observe pulse, respiration & bleeding.
- Postoperative antibiotics & analgesic.
- Diet:
 - Cold drinks in the first day
 - Semisolid diet on the second day
 - Avoid hard, hot and spicy diet in first week

TONSILLECTOMY

COMPLICATIONS

Anaesthetic complications

- Toxicity
- Idiosyncrazy
- Resp. arrest
- Cardiac arrest
- Intubation granuloma
- Aspiration pneumonia
- Atelectasis of the lung

Operative complications

Perioperative

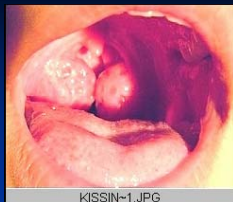
- Primary Hge
- Mishaps & Trauma

Immediate postoperative

- Suffocation
- Reactionary Hge
- Odema of the uvula
- Local or chest infection
- Otitis media, Septicaemia
- Velopharyngeal incompetence

Late postoperative

- Secondary Hge
- Palatal scarring
- Dryness of the throat
- Change in the voice
- Liability to catch infection
- Tonsillar remnants
- Glossopharyngeal neuralgia



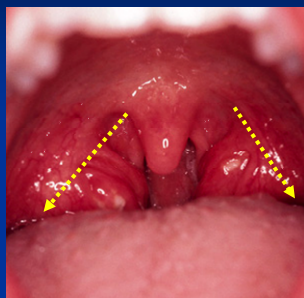
Tonsillectomy or
Tonsillotomy

Tonsillotomy

▣ **Partial Tonsillar Resection:**

- Laser (CO₂, YAG or KTP laser)
- Radiofrequency Tissue Ablation (RFTA)

CO₂ Laser Tonsillotomy



- *Partial tonsillar resection*
 - *Remove the protruding part of each tonsil*

CO₂ Laser Tonsillotomy Surgical Technique

2 Steps.

- Slight medial retraction of the tonsil.
- Laser incision of the tonsil, 2-3 mm lateral to anterior pillar, using 20 W beam in a continuous mode.

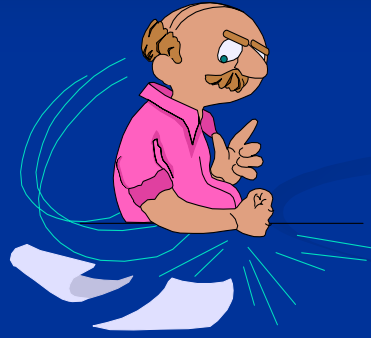


Benefits of Tonsillotomy

Advantages of tonsillotomy compared to tonsillectomy as regard to:

- Perioperative bleeding
- Duration of surgery
- Postoperative pain
- Postoperative healing
- Postoperative hemorrhage
 - Long term effects

Conclusion



CO₂ Laser Tonsillotomy

Advantages:

- Efficient and safe.
- Less painful.
- Minimal complications (bleeding & infection).
- Preserve immune system and child development.

CO₂ Laser Tonsillotomy

Indications.

- Airway obstruction from large tonsils.
- With no evidence of an inflammatory process.

