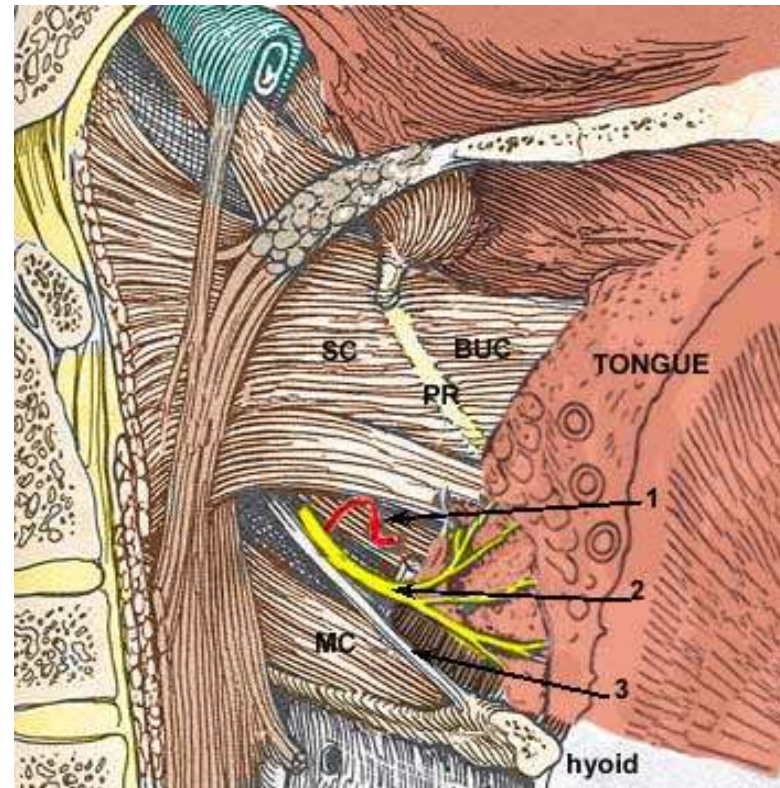
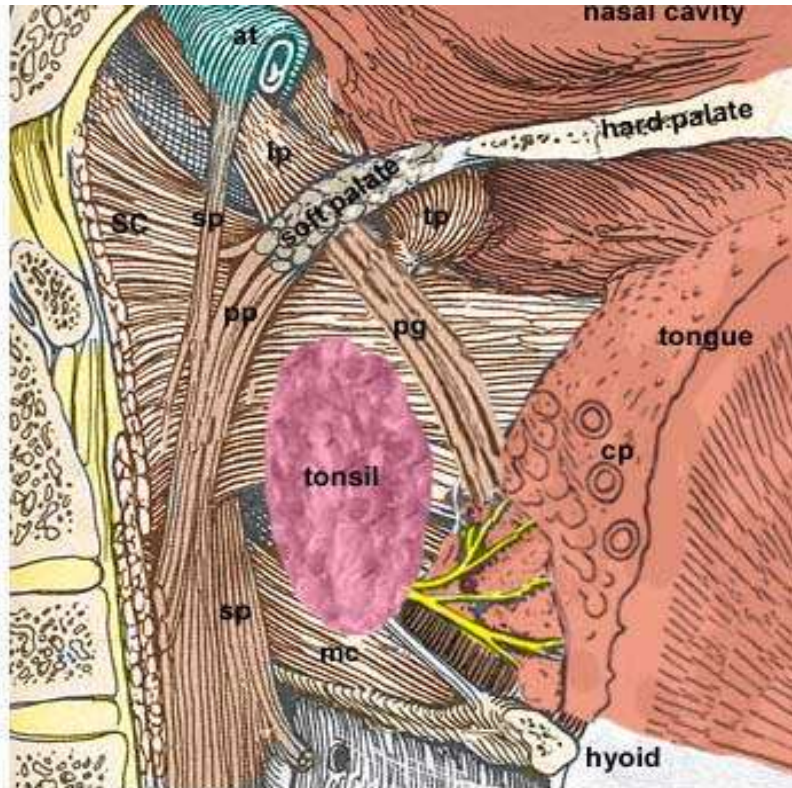




PALATINE TONSILS

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TONSILLAR BED



ARTERIAL SUPPLY OF TONSIL

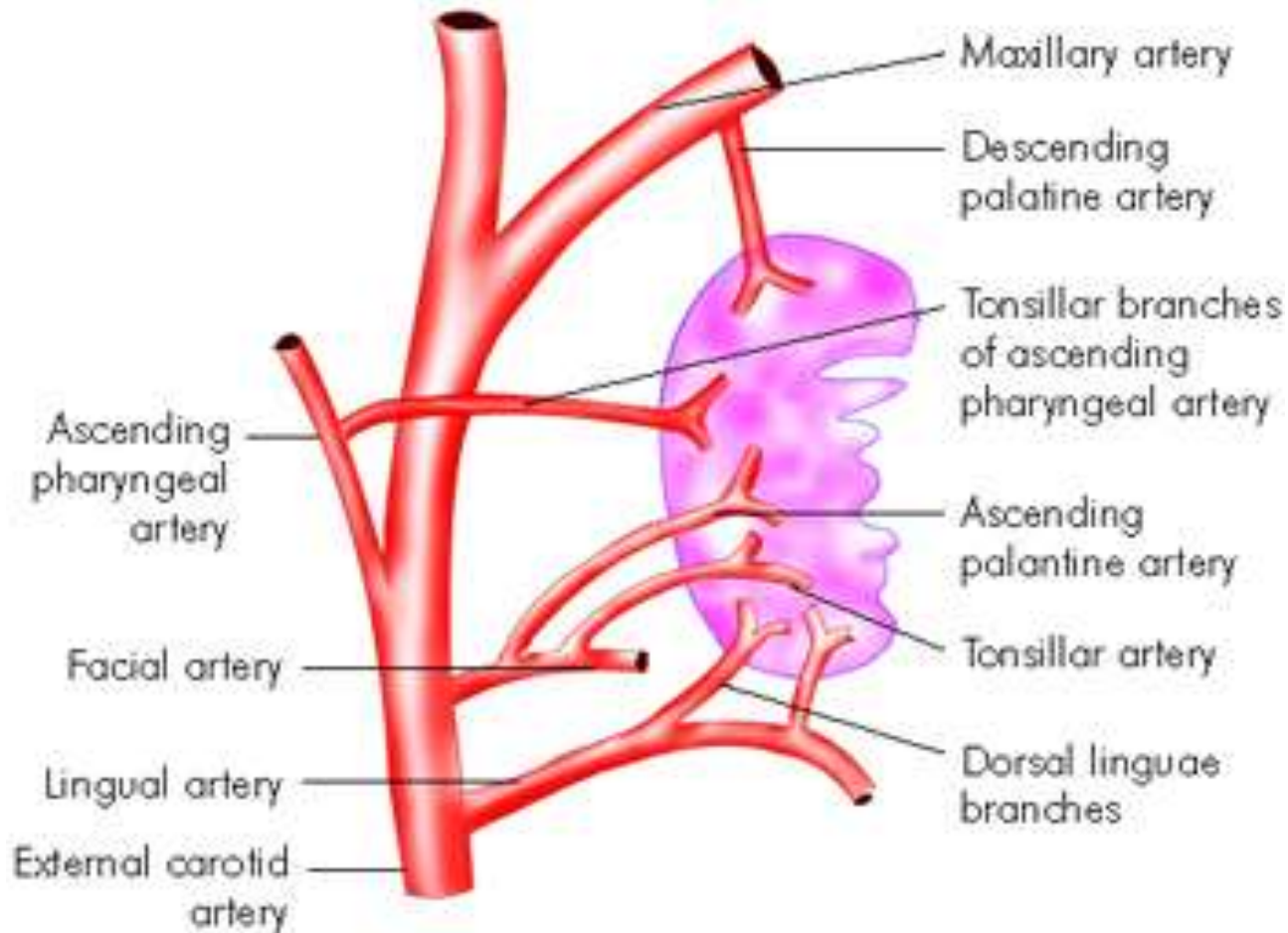
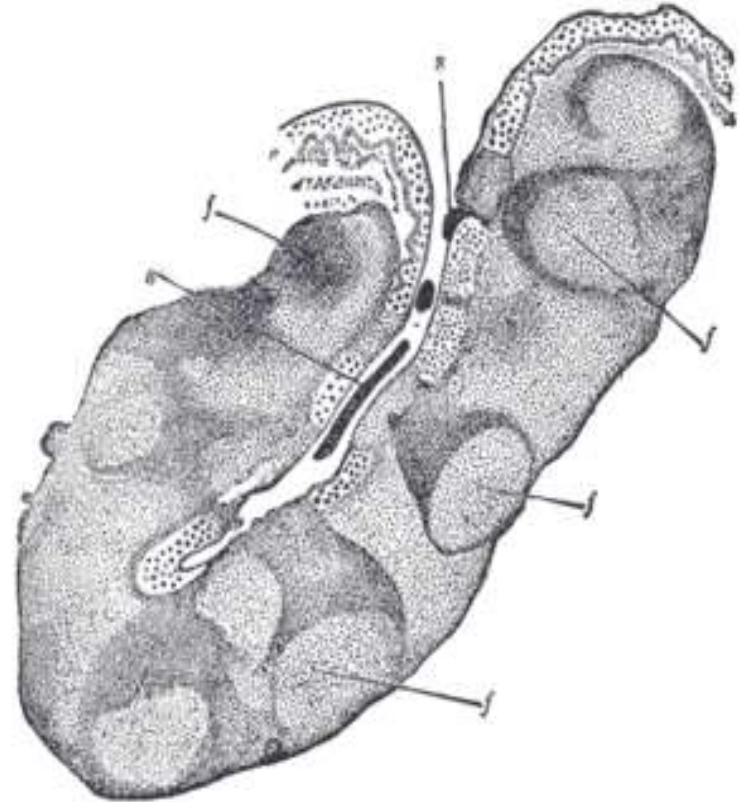


Fig. 50.3 Arterial supply of tonsil.



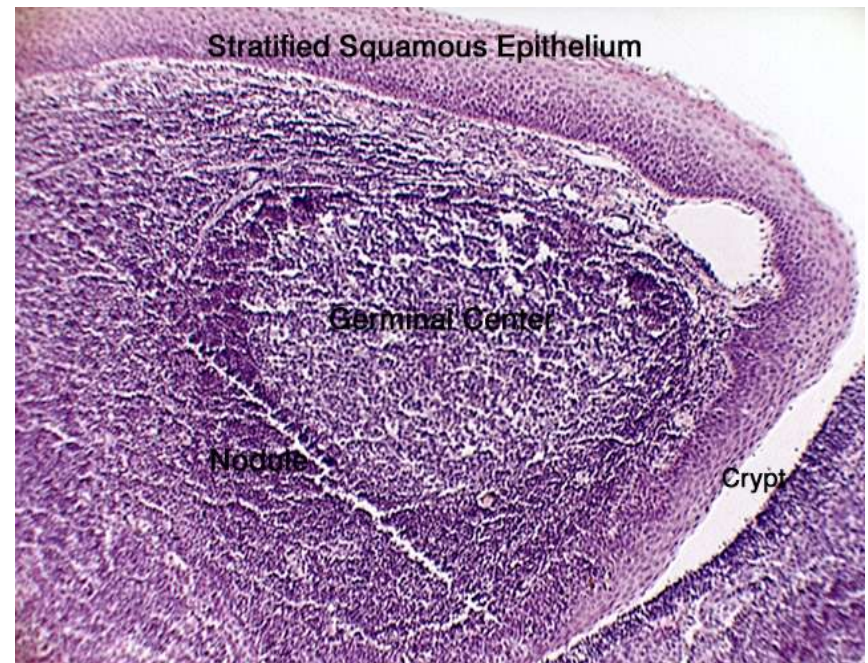
STRUCTURE OF TONSIL

- Plica semilunaris
- Plica triangularis
- The medial surface of the tonsil presents from twelve to fifteen orifices leading into small crypts or recesses from which numerous follicles branch out into the tonsillar substance
- The lateral or deep surface is adherent to a fibrous capsule which is continued into the plica triangularis.

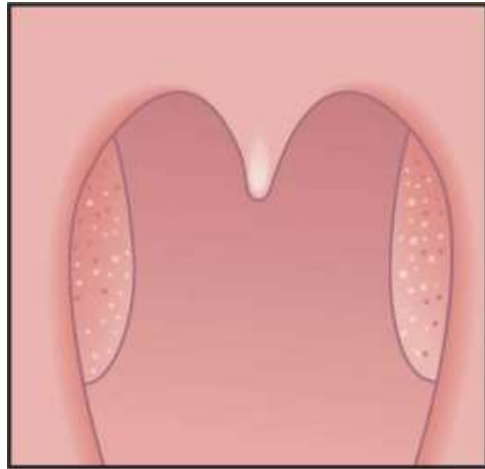


HISTOLOGY OF TONSIL

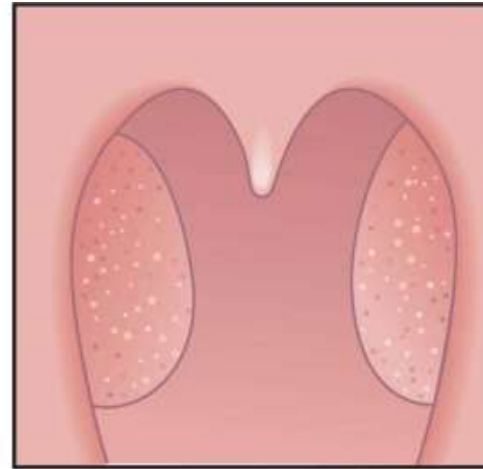
- Aggregates of lymphocytes arranged in a follicular manner embedded in a stroma of connective tissue.
- Stratified Squamous Epithelium extends irregular convuluted invaginations into parenchyma forming crypts.



GRADING OF TONSILLAR SIZE



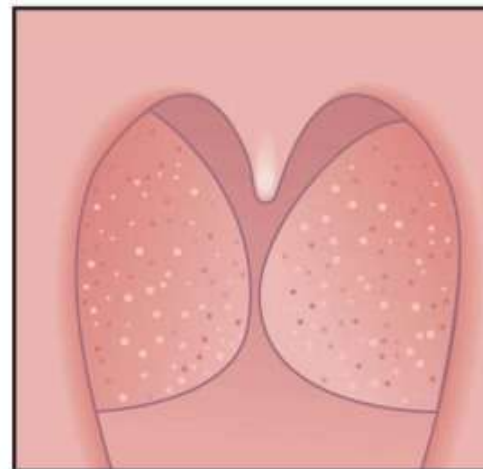
1+



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3+



4+

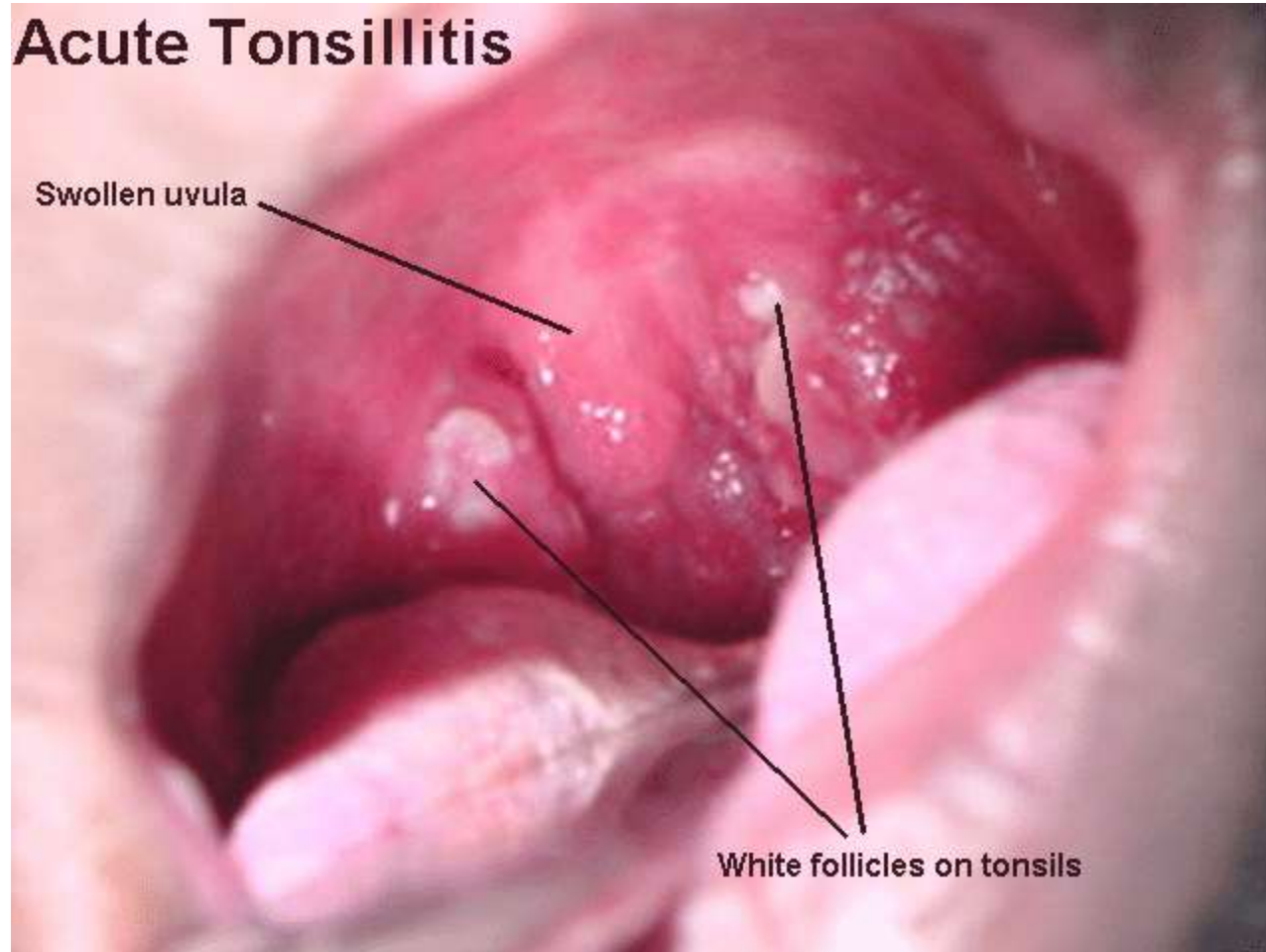


TONSILLAR DISEASE

- Recurrent acute tonsillitis
- Chronic tonsillitis
- Obstructive tonsillar hyperplasia



ACUTE TONSILLITIS



FOLLICULAR TONSILITIS



KISSING TONSILS

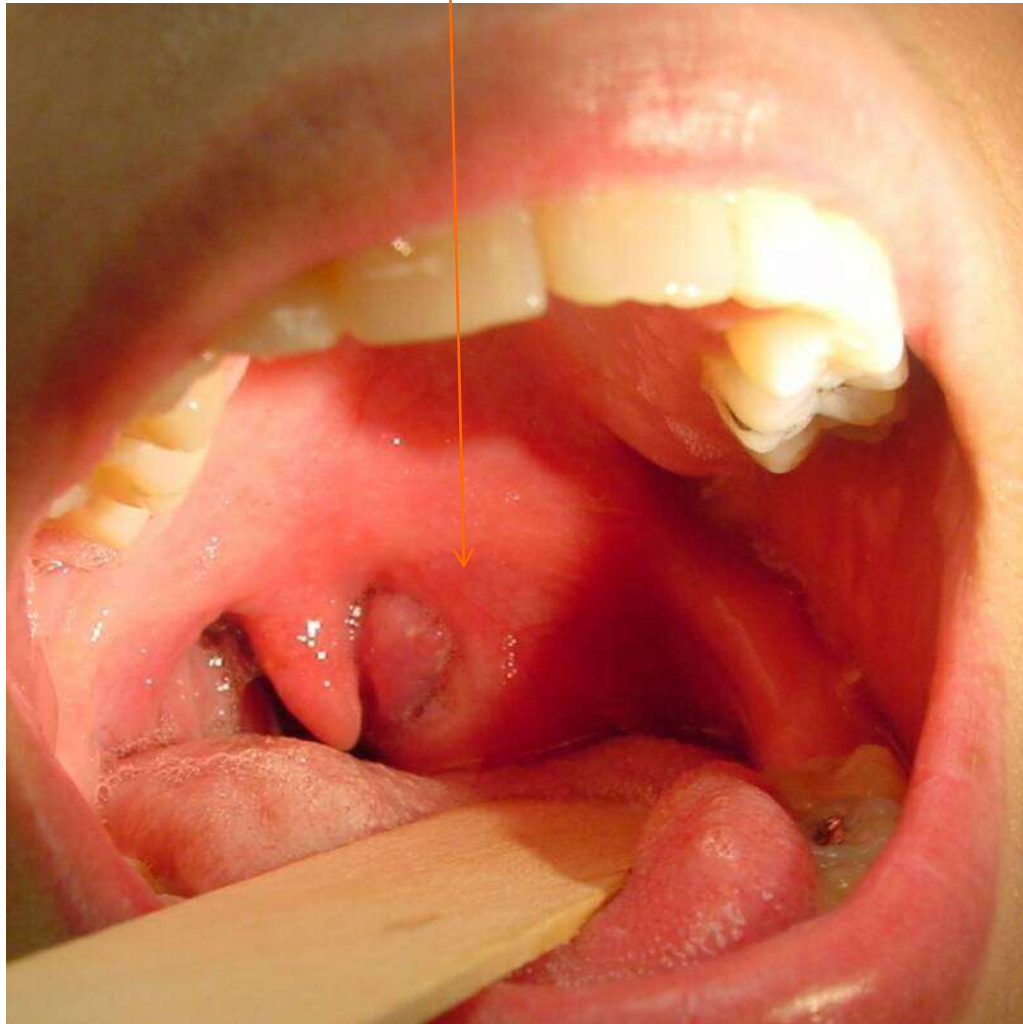


PERITONSILLAR ABSCESS

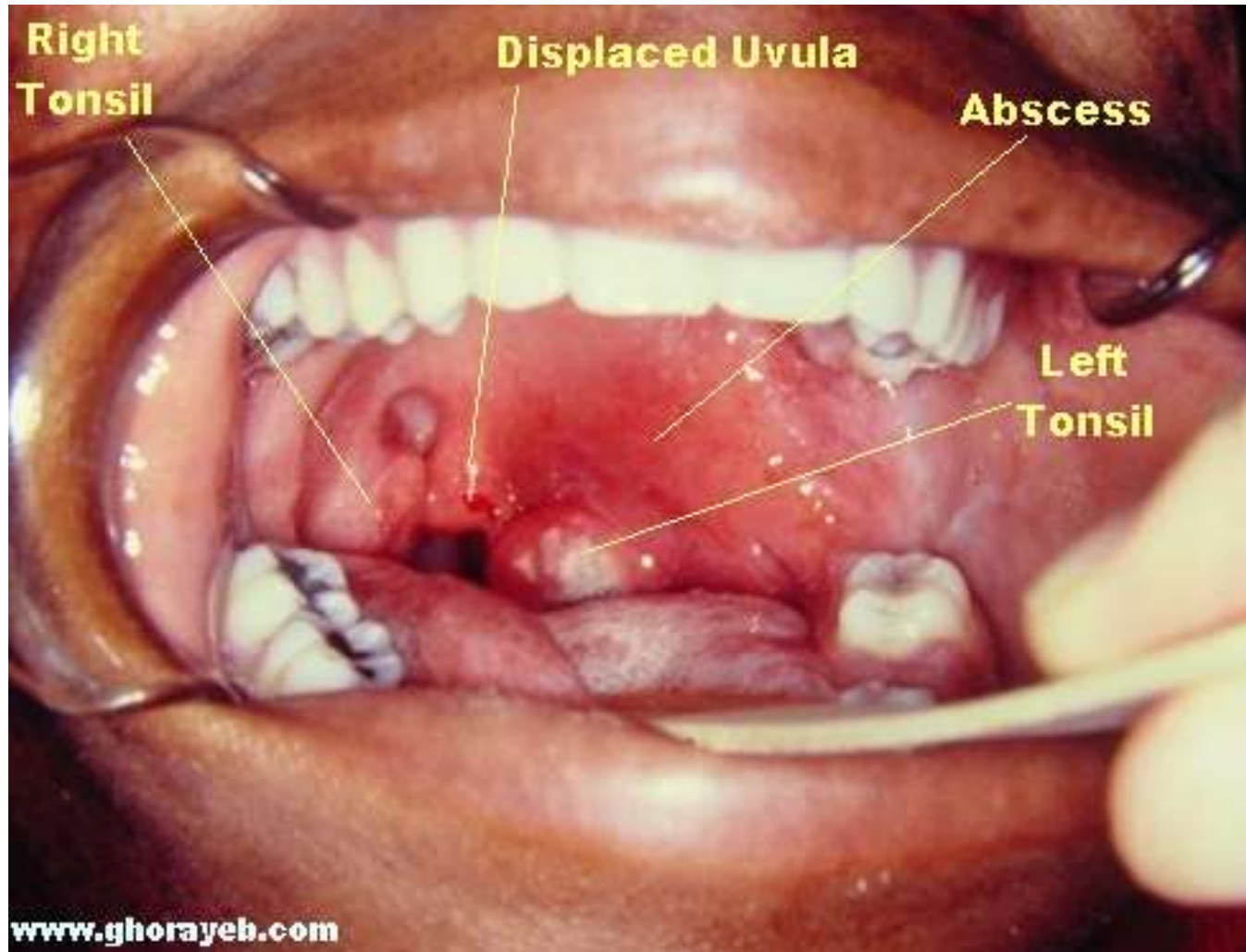
- A collection pus forms between tonsil and its bed.
- Prior to formation of pus there is frequently a period of peritonsillar cellulitis.
- Patient presents with severe pharyngitis lateralised to one side.
- Marked associated lymphadenopathy.
- Severe trismus.
- Spontaneous rupture possible.



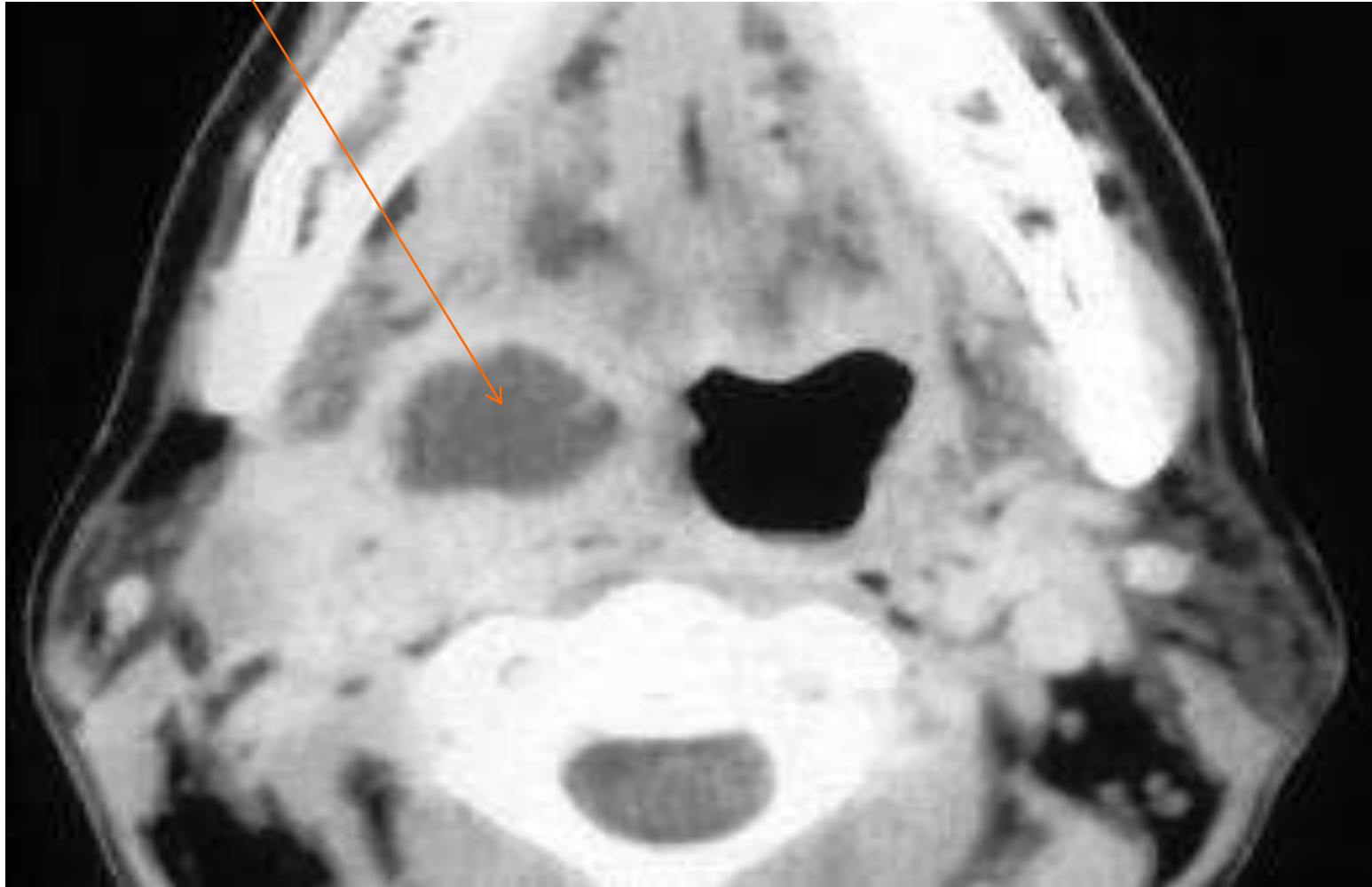
PERITONSILLAR CELLULITIS



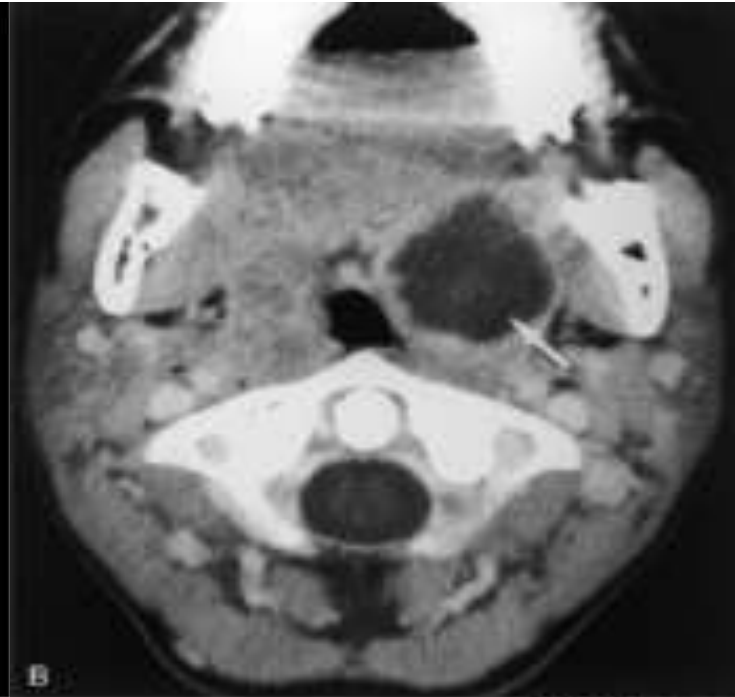
QUINSY



QUINSY



QUINSY ON CT



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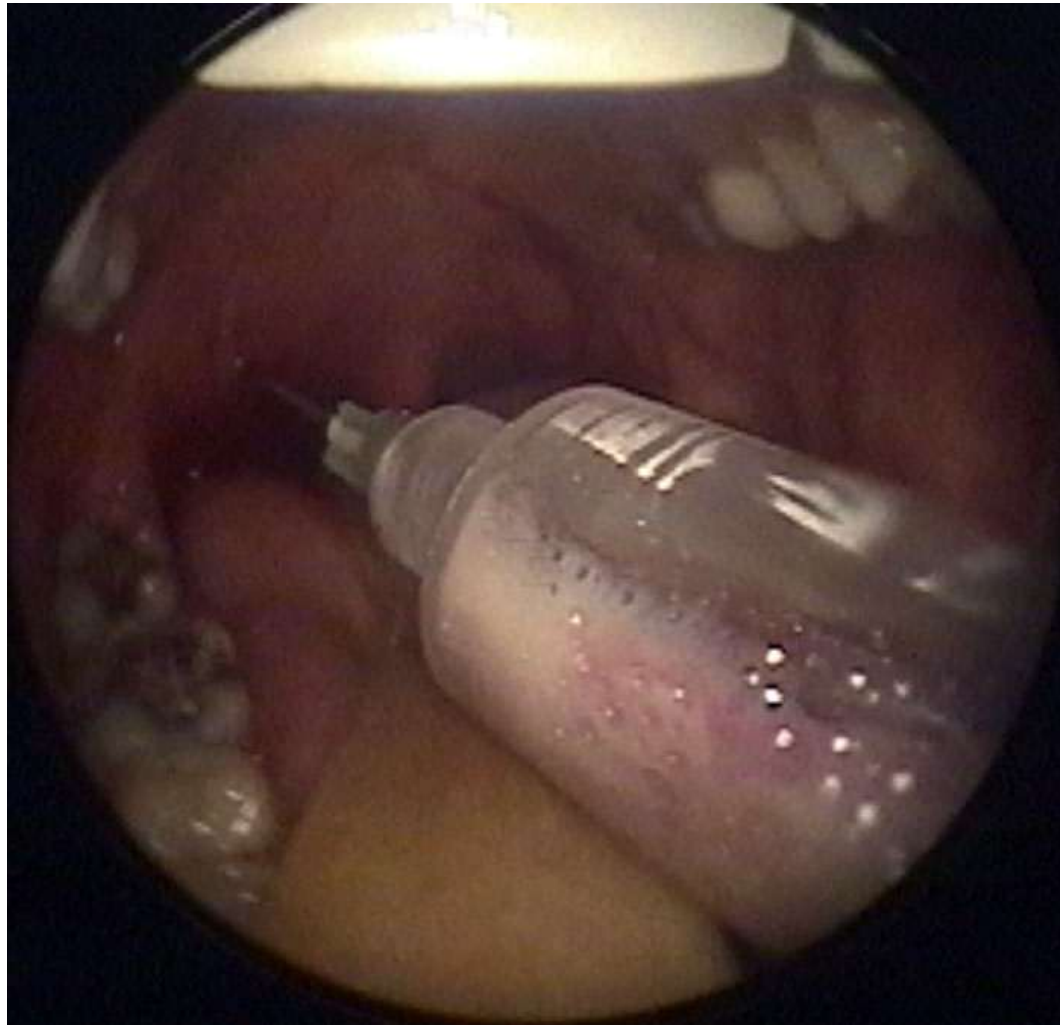


TREATMENT

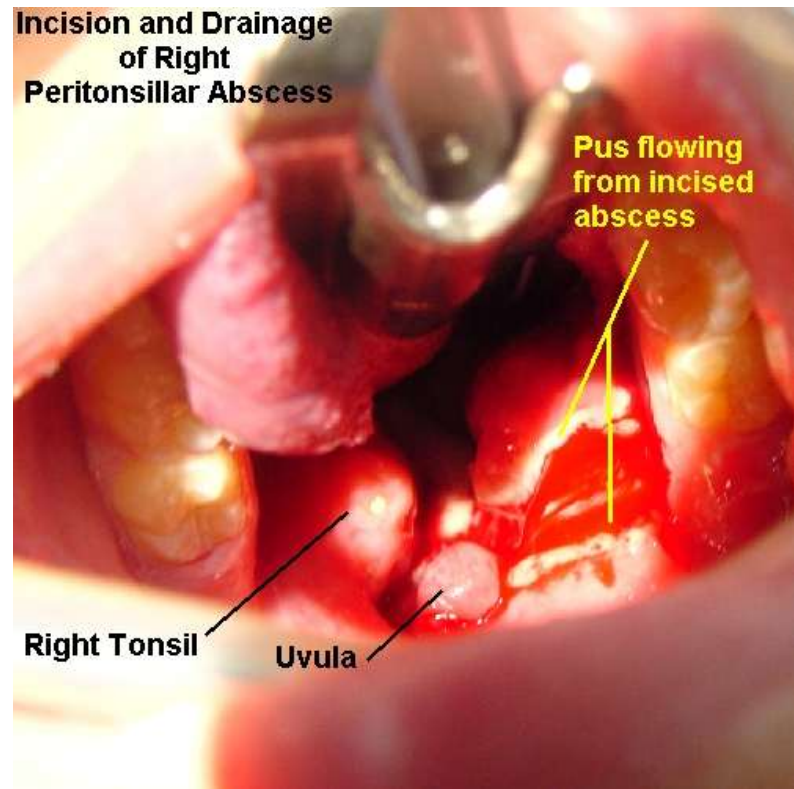
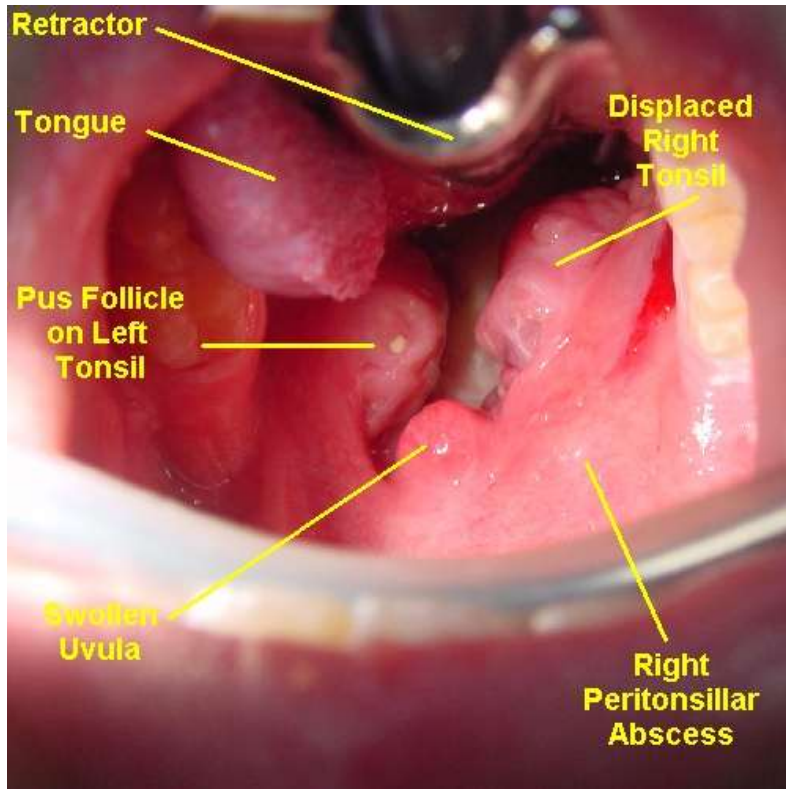
- Immediate hospitalisation.
- Assess airway
- Spontaneous rupture carries risk of aspiration
- Aspiration of abscess with wide bore needle along with antibiotic therapy
- Incision drainage
- **Interval tonsillectomy**



ASPIRATION OF QUINSY



INCISION AND DRAINAGE



FOREIGN BODY LODGED IN TONSIL

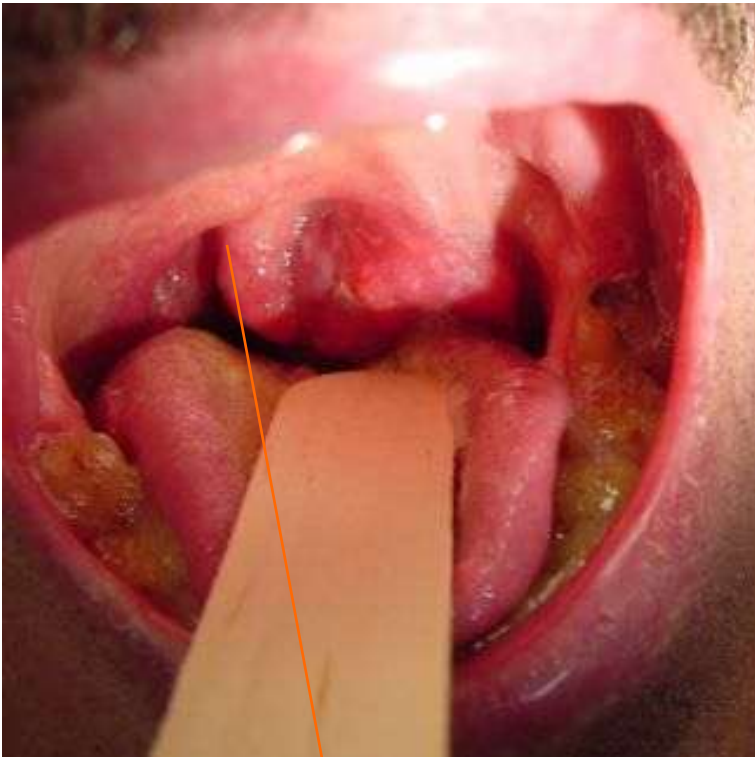


TONSILLOLITHS

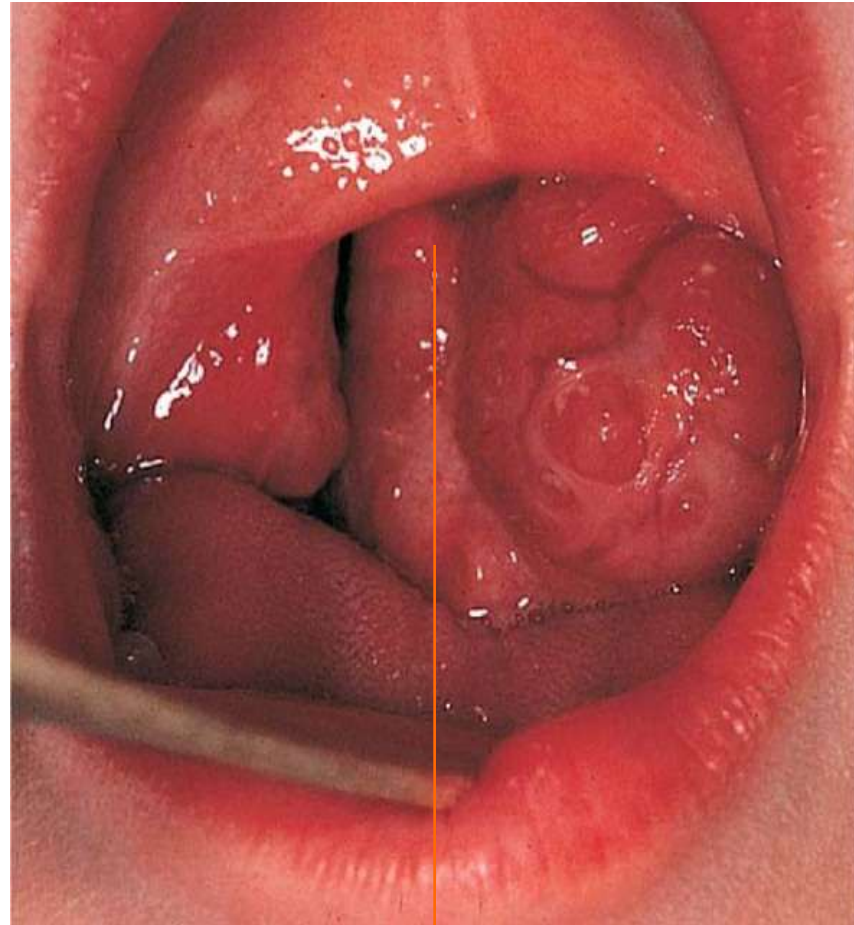
- Occur more frequently in adults
- Recurrent sore throats, chronic cough or otalgia
- Initially, these concretions are soft and cheesy, but with time, they calcify and become hard calculi



UNILATERAL ENLARGEMENT OF TONSIL



- **Squamous Cell Carcinoma**



Lymphoma

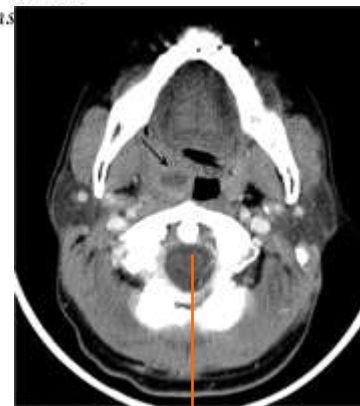
UNILATERAL ENLARGEMENT OF TONSIL

CYST



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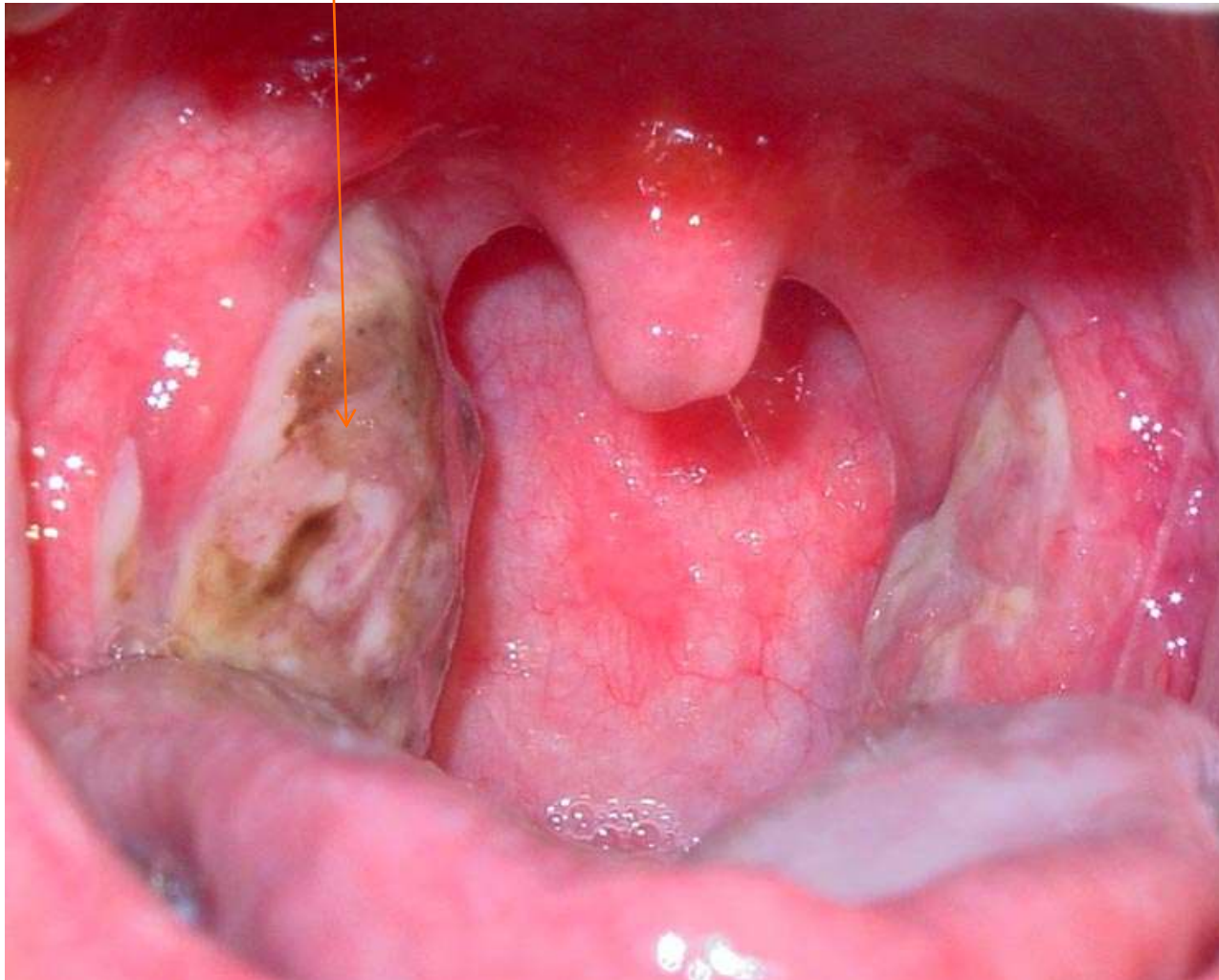
Fig. 2. Exéresis quirúrgica del tonsilolito.
Surgical removal of the tonsilolith.



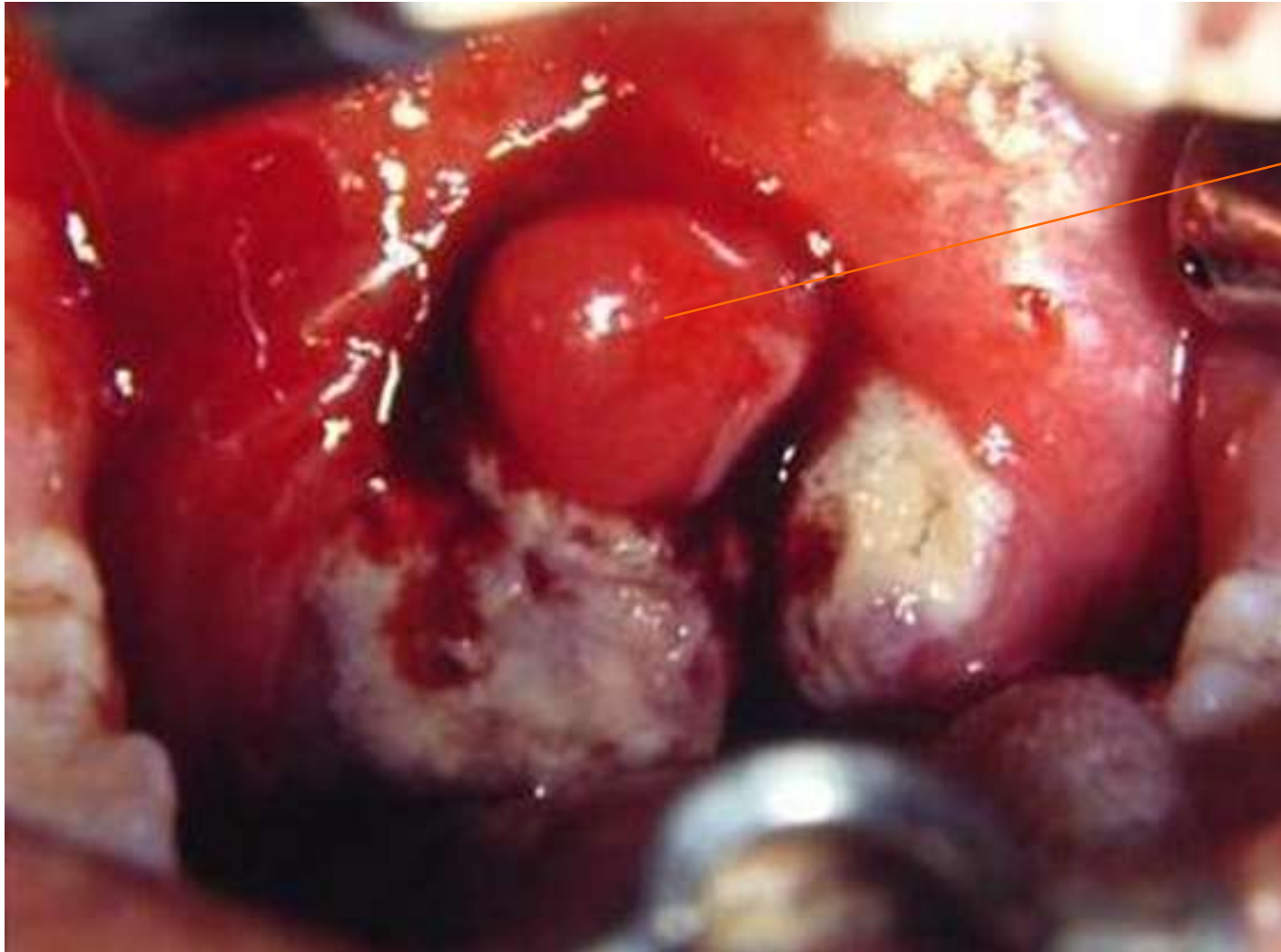
Intra-tonsillar Abscess



INFECTIOUS MONONUCLEOSIS



INFECTIOUS MONONUCLEOSIS



Uvula



INFECTIOUS MONONUCLEOSIS OR "KISSING DISEASE"

- Caused by the Epstein-Barr virus
- Symptoms are fever, sore throat, and swollen lymph glands.
- Sometimes, a swollen spleen or liver involvement may develop.
- Heart problems or involvement of the central nervous system occurs only rarely
- Rarely fatal



- Heterophile antibodies (monospot) help confirm the diagnosis
- Titers of IgM and IgG are most specific.
- Treatment is usually supportive. In cases in which adenotonsillitis is so severe that airway symptoms emerge, steroid and antibiotic therapy may be necessary.
- Ampicillin and Amoxicillin have been associated with a rash in 90% of EBV patients and should be avoided



DIPTHERIA



DD OF ULCERO-MEMBRANOUS LESIONS OVER TONSIL

- Diphtheria
- Infectious mononucleosis
- Agranulocytosis
- Streptococcal tonsillitis
- Leukaemia
- Oral candidiasis
- Aphthous ulcers



INDICATION GUIDELINES FOR TONSILLECTOMY

- Patient with 3 or more infections of tonsils and/or adenoids per year despite adequate medical therapy.
- Hypertrophy causing dental malocclusion or adversely affecting orofacial growth documented by orthodontist.
- Hypertrophy causing upper airway obstruction, severe dysphagia, sleep disorders, or cardiopulmonary complications.



INDICATION GUIDELINES FOR TONSILLECTOMY

- Peritonsillar abscess
unresponsive to medical
management and drainage
documented by surgeon, unless
surgery performed during acute
stage.
- Persistent foul taste or breath due
to chronic tonsillitis not responsive
to medical therapy

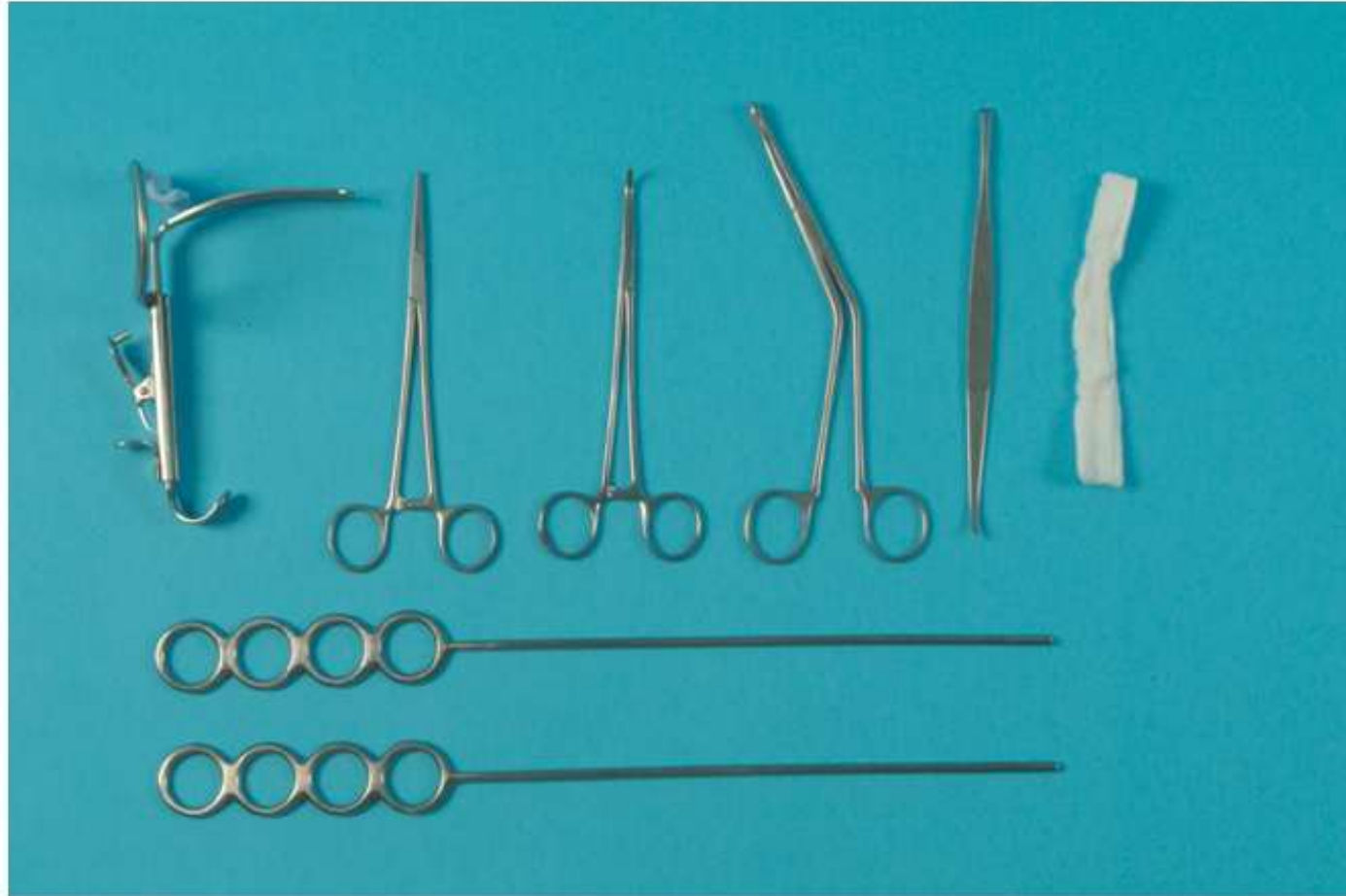


INDICATION GUIDELINES FOR TONSILLECTOMY

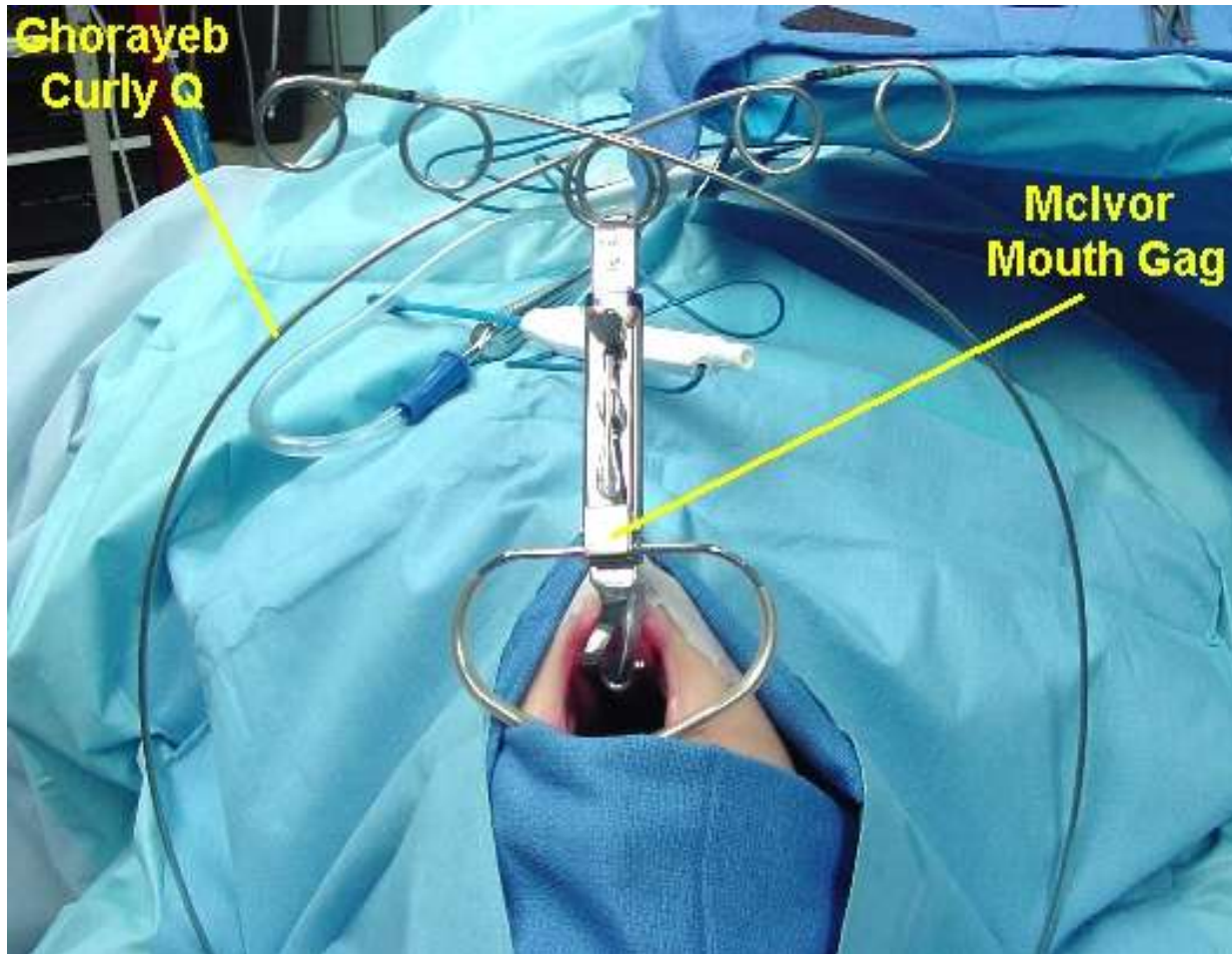
- Chronic or recurrent tonsillitis associated with the streptococcal carrier state and not responding to beta-lactamase-resistant antibiotics.
- Unilateral tonsil hypertrophy presumed neoplastic.
- Recurrent suppurative or otitis media with effusion



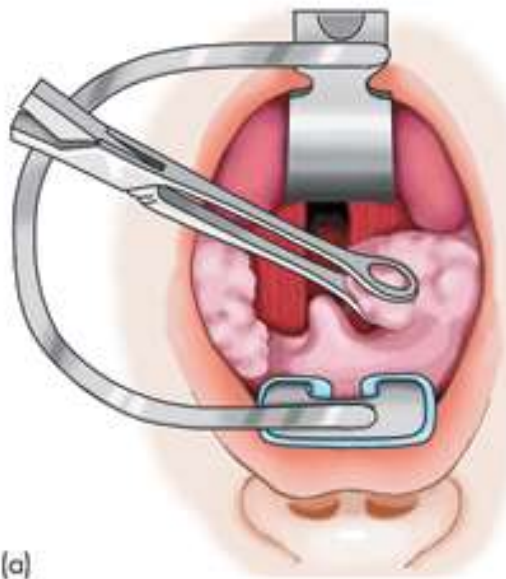
TONSILLECTOMY BY BLUNT DISSECTION



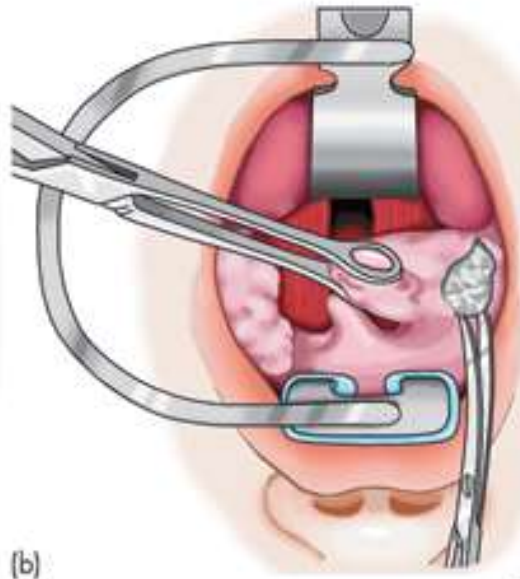
COLD/BLUNT DISSECTION



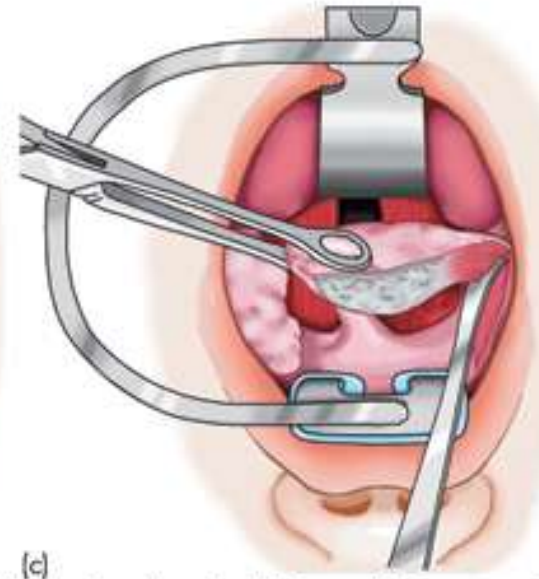
BLUNT DISSECTION



(a)



(b)



(c)

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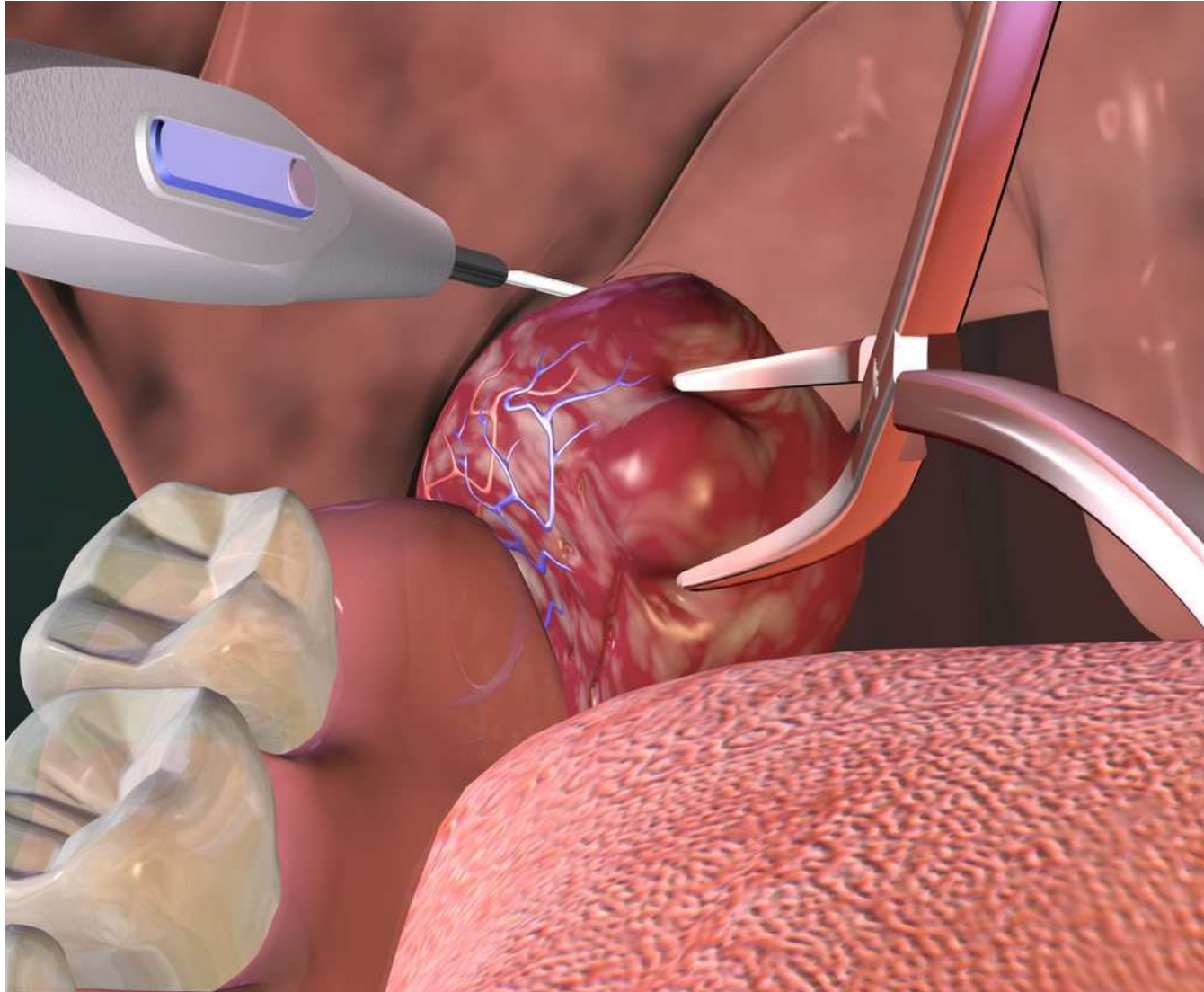


ELECTROCAUTERIZATION

- It is currently the most popular technique for tonsillectomy
- When compared to cold dissection, there is no difference in postoperative hemorrhage rates, but electrocauterization increases pain
- The reduction in operative time and intraoperative blood loss has made it the most commonly performed technique of tonsillectomy.



ELECTROCAUTERIZATION



INTRACAPSULAR TONSILLECTOMY

- A microdebrider set at 1500 rpm in the oscillating mode is used to perform the intracapsular tonsil resection
- A thin rim of lymphoid tissue was left on the capsule
- Suction cautery was used for hemostasis

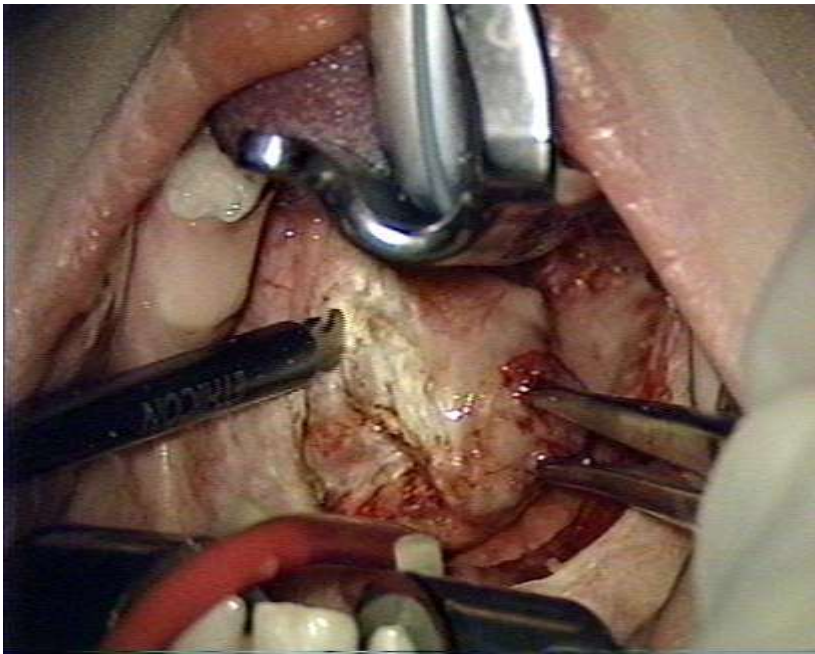


HARMONIC SCALPEL TONSILLECTOMY

- The harmonic scalpel is an ultrasonic dissector coagulator that utilizes ultrasonic vibration to cut and coagulate tissues
- The cutting mechanism is possible with the sharp blade with a vibratory frequency
- The coagulation mechanism occurs by transferring mechanical energy to tissues
- This breaks hydrogen bonds of proteins and generates heat from tissue friction
- The temperature of the harmonic scalpel is lower than electrocautery (50° – 100° C, 150° – 400° C, respectively)
- Hence there is less thermal damage to tissues

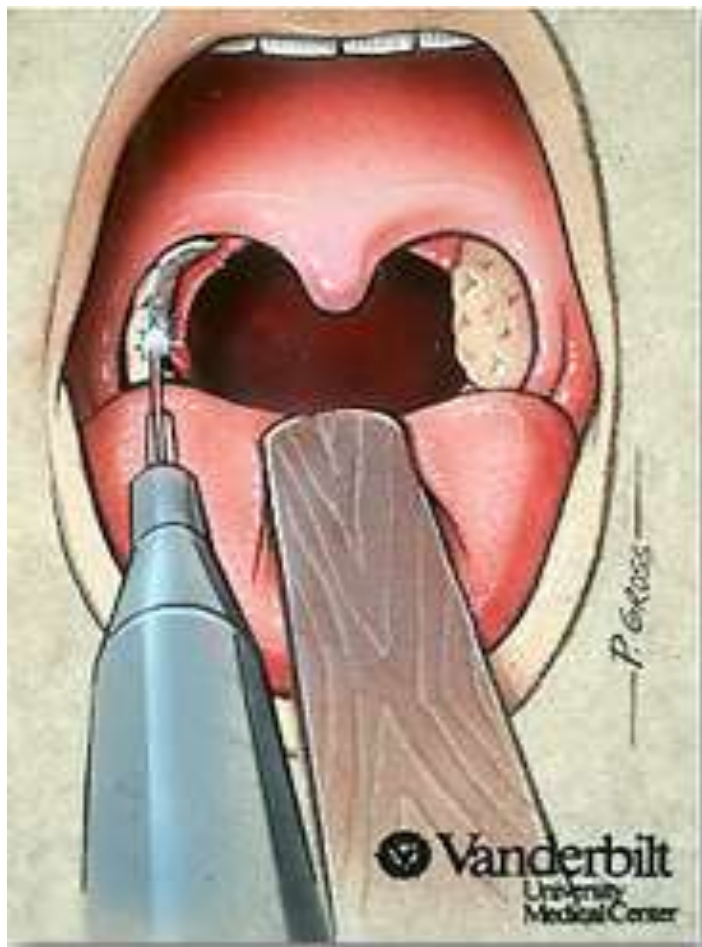


HARMONIC SCALPEL TONSILLECTOMY



LASER TONSILLECTOMY

- The CO2 and KTP lasers have been used to perform tonsil surgery
- Laser provides little benefit over dissection tonsillectomy except to minimize intraoperative bleeding

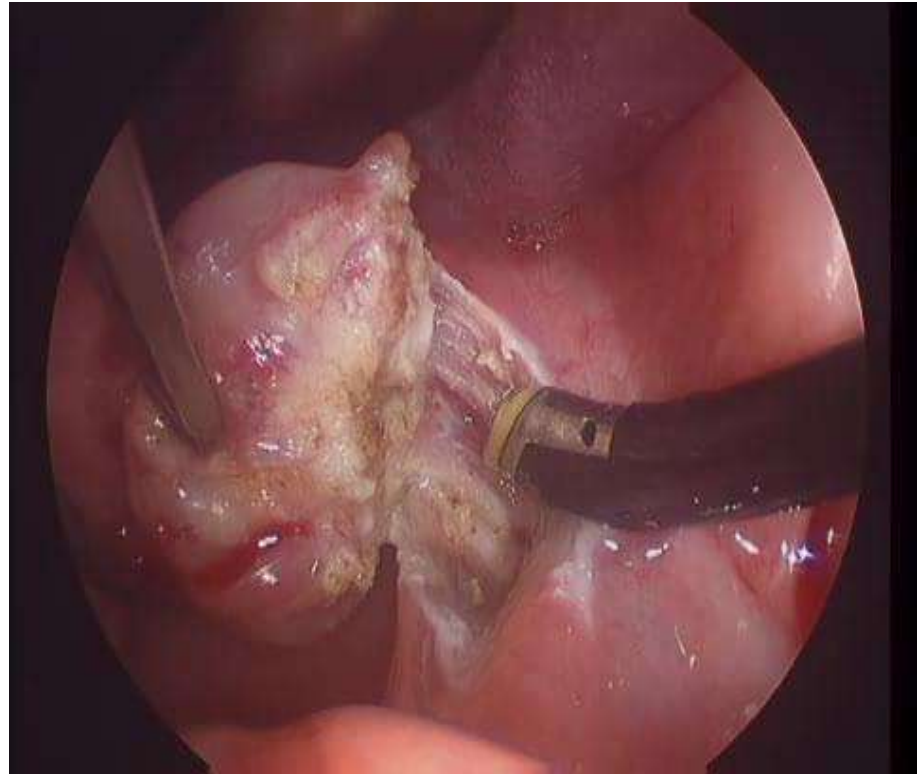


COBLATION OR COLD ABLATION

- It is a technique that utilizes a field of plasma, or ionized sodium molecules, to ablate tissues.
- Bipolar radiofrequency energy is transferred to sodium ions, creating a thin layer of plasma.



- This effect is achieved at temperatures from 40° to 85° C, in comparison to electrocautery which can reach above 400° C.
- The reduction in thermal injury to surrounding tissues offers reduced postoperative pain and morbidity.



PERIOPERATIVE COMPLICATIONS OF TONSILLECTOMY

- TM joint dysfunction
- Trauma to surrounding structures
- Nontraumatic atlantoaxial subluxation, due to infection in periodontoid vascular plexus, bringing about spinal ligament laxity



HAEMORRHAGE

- Primary (within first 24 hours)
- Secondary (after 24 hours)



POINTS TO REMEMBER

- Cold steel dissection tonsillectomy is widest available with lowest post-op haemorrhage
- Adequate analgesia in post-op period mandatory
- In secondary haemorrhage surgery is rarely needed. Bleeding settles with Abx therapy alone

