

DISEASES OF THE TONSIL

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Acute Tonsillitis: acute inflammatory condition of the faucial tonsil which may involve the mucosa, crypts, follicles and /or tonsillar parenchyma.

Causative agents;

-Viral:Initially starts with viral infection then followed by secondary bacterial infection.Common viruses are influenza,parainfluenza,adenovirus and rhinovirus.

-Bacterial:Streptococcus hemolyticus,Hemophilus influenza,pneumococcus,M.catarrhalis.

Pathology and pathogenesis: Usually it starts in the childhood when there is low immune status. Depending on the progress of the disease, this can be classified further into the following types.

- **Catarrhal tonsillitis:** It occurs due to viral infection of the upper respiratory tract involving the mucosa of the tonsil
 - **Cryptic tonsillitis:** Following viral infection, secondary bacterial infection supervenes and gets entrapped within the crypts leading to localized form of infection
 - **Acute follicular tonsillitis.** It is severe form of tonsillitis caused by virulent organisms like streptococcus hemolyticus and Hemophilus. It causes spread of inflammation from tonsillar crypts to the surrounding tonsillar follicles.
- Acute parenchymal tonsillitis:** The secondary bacterial infection will invade to the crypts and it is rapidly spreads into the tonsillar parenchyma..

Acute follicular



Cryptic tonsillitis

tonsillitispictures.org



Acute catarrhal/superficial



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PARENCHYMATOUS TONSILLITIS

- When the whole tonsil is uniformly congested and swollen it is called acute parenchymatous tonsillitis



Acute membranous



Clinical features.

1- Symptoms

- Fever
- Generalized malaise and bodyache.
- Odynophagia.
- Dry cough.
- Sorethroat.

2- Signs

- Congested and oedematous tonsils
- Tonsils may be diffusely swollen in parenchymatous tonsillitis.
- Crypts filled with pus in follicular tonsillitis.
- Membrane cover the tonsil and termed as membranous tonsillitis.
- Tender enlarged jugulodigastric lymph nodes.
- Signs of upper respiratory tract infection and adenoiditis.

Investigations.

- Throat swab for culture and sensitivity.
- Blood smear to rule out hemopoietic disorders like leukemia, agranulocytosis.
- Paul-Bunnell test may be required if membrane seen to rule out infectious mononucleosis.
- X-ray of paranasal sinus to rule out nasosinus septic foci.
- X-ray of the soft tissue of the nasopharynx to rule out adenoid hypertrophy.

Treatment

- Penicillin is the drug of choice especially for streptococcus. B-Lactamase producing hemolytic streptococci should be treated with amoxicillin+clavunalic acid combinations. Erythromycin should be preferred in patients sensitive to penicillin.
- Antiseptic gargles and throat lozenges may be given.
- Paracetamol for pain and fever.

Differential diagnosis.

- Scarlet fever.
- Diphtheria.
- Vincent's angina.
- Agranulocytosis.
- Other causes of membrane over the tonsil like leukemia

COMPLICATIONS.

1-Local.

- Acute otitis media.
- Retropharyngeal ,parapharyngeal abscess.
- Peritonsillar abscess.
- Respiratory obstruction.

2-General.

- Acute rheumatic fever.
- Septicemia.
- Glomerulonephritis.

Chronic Tonsillitis: It is the chronic inflammation of the palatine tonsil which occurs as a result of repeated attacks of acute tonsillitis or due to inadequately resolved acute tonsillitis.

Etiopathological.

- b-hemolytic streptococcus.
- As complication of acute tonsillitis.
- Mostly affects children and young adults.
- Predisposing factors may be due to chronic infection in sinuses or teeth.

Chronic follicular



Types

A-Chronic follicular tonsillitis. Tonsillar crypts are full of cheesy material that appear as yellowish spots.

B-Chronic parenchymatous tonsillitis. Following repeated attack of acute tonsillitis the lymphoid follicles of tonsillar parenchyma undergo hyperplasia..

C-Chronic fibrotic tonsillitis. Here the tonsils are small due to atrophy.

Clinical features

1- Symptoms.

-Sore throat.

-Cough.

-Halitosis.

-Bad taste of the mouth.

-Thick speech.

-Difficulty in swallowing.

-Sleep apnea.

2- Cardinal signs

- Persistent congestion of anterior pillar.
- Positive tonsillar sequeze.
- Enlarged jugulodigastric lymph node.
- Enlarged tonsils

Treatment

1-Conservative

- diet.
- Good oral hygen.
- Treatment of tooth and sinus infection.

2-Surgical. **Tonsillectomy**

Indications

a- Absolute indications

- Biopsy if there is suspicion of malignancy.
- Sleep apnea syndrome.
- peritonsillar abscess:Second attack.



b-Relative indications.

- Repeated episodes(6 attack/year for 2 years)
- Access in glossopharyngeal neurotomy. And resection of ossified styloid process.
- As Part of Uvulo-palato-pharyngo-plasty).
- Tonsillar cyst,tonsillolith.
- IF the tonsil acting as septic foci for rheumatic heart diseases ,arthritis and glomerulonephritis.
- Failure to thrive.

Contraindications

- Active infections
- Bleeding disorders.
- Cervical spine pathology.
- Endemic of polio.
- Failure to control hypertension and diabetes.

Complications

1-Immediate.

- Primary and reactionary hemorrhage.
- Injury to structures-Teeth,lips,gums,tongue and palate.
- pain throat and referred otalgia.
- Fever.
- Airway obstruction may occur due to uvular oedema,hematoma and aspiration of material.
- Secondary hemorrhage occurs usually in the 6th-10th days.

2-Delayed.

- 1-Lingual tonsillitis.
- 2-Nasopharyngeal stenosis.
- 3-Velopharyngeal insufficiency.
- 4-Residual tonsillitis.

Types of posttonsillectomy hemorrhage.

1-Primary hemorrhage. This occurs during surgery due to paratonsillar veins due to

- Poor selection of cases.
- Improper technique.

Treatment

- Packing the tonsillar fossa with wet gauze and wait for 5 minutes.
- If bleeding persists so ligate or cauterize the bleeding vessel.

2-Reactionary hemorrhage. This occurs in the postoperative period within 24 hours, due to

- Slipping of the ligature.
- Failure to ligate all vessels.
- Hypotensive anesthesia.
- Clot in the fossa.
- Injured muscle.

Treatment.

- 1-Vital signs should maintained. treat hypovolemia and blood loss.
- 2-Remove the clot and apply pressure with simple pack.
- 3-Hydrogen peroxide gargle is helpful in removing the clot and mild cauterizing agent.
- 4-If bleeding persists, so admit the patient to the theater and ligate or cauterize the bleeding vessel.

Secondary hemorrhage. This is due to sepsis of the tonsillar fossa and usually occurs in the 6th to 10th days

Treatment

- 1-Vital signs and treat blood loss.
- 2-Start parenteral broad spectrum antibiotic including metronidazole.
- 3-Cold liquid diet.packing for five minutes and application of hydrogen peroxide.
- 4-IF bleeding persists so should enter the patient to the theatre and interpillor suturing is done.

Peritonsillar abscess(Quinzy)

It is acute inflammatory process associated with pus collection in the peritonsillar space which lies between the tonsillar capsule and superior constrictor muscle

Clinical features

-symptoms

- Fever,chills,malaise,body ache and toxic features.
- Acute sever unilateral odynophagia.
- Referred otalgia.
- Neck pain.
- Trismus.
- Muffled voice
- Dribbling of the saliva.

Signs

- Tonsil is usually pushed medially and downward .
- Congested tonsil/membrane may covered the tonsil.
- Uvula is edematous ,congested and deviated to opposite side.

Treatment

- IV antibiotic and analgesia.
- If dysphagia is severe :Hospitalization and IV fluid.
- Wide bore needle aspiration.
- Incision and drainage.
- Hot tonsillectomy

Tonsillolith

This is calculus created by deposition of the salt in the crypt forming hard mass.

Clinical features

- Halitosis.
- Discomfort.
- Sore throat.
- Fever.

Treatment

- Removal of the tonsillar stone.
- Recurrent stones is treated by tonsillectomy.

Tonsil stones



Ulceration of the tonsil

- Infections(acute and chronic)
- Neoplastic(lymphoma,sq.cell carcinoma)
- Blood diseases(leukemia,Agranulocytosis)
- Miscellaneous(Aphthus ulcer,Behcet).

DDX of unilateral tonsillar enlargement.

- peritonsillar abcess
- parapharyngeal mass.
- Lymphoma or squamous cell carcinoma.

THANK YOU