Quinsy

By

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Introduction:

It is also known as peritonsillar abscess. It still remains a common entity in the emergency wing of the Hospital and otolaryngological practice.

Incidence:

Estimated to be 30 cases per 100,000 people per year.

Mean age affected:

Commonly involves persons between 20-30 years. It shows no sexual predisposition. Both male and female sexes are affected equally. It is very rare in children under the age of 5.

Site of involvement:

Quinsy usually occurs near the superior pole of the palatine tonsil, just outside the tonsillar capsule between the superior constrictor and the palatopharyngeus muscles. It should be noted that quinsy could be closely related to tonsillar artery, internal carotid artery and facial arteries. Hence during incision and drainage adequate care should be taken not to give a deep incision to drain the abscess.

The role of emergency care physician is to identify this condition, render appropriate treatment and provide adequate follow up till the patient recovers fully.

Symptoms:

1. Fever
2. Sore throat
3. Intense pain while swallowing. Pain radiates to ipsilateral ear (referred otalgia).
4. Drooling of saliva because it is very painful for the patient to even swallow saliva
5. Hot potato voice (muffled voice). Rhinolalia clausa.
6. Trismus
7. Halitosis

Examination:

Pharyngitis would be evident. In almost all patients there is a certain degree of soft palate oedema with bulging of tonsil. The uvula would be seen deviated away from the infected tonsil. On gentle pressure over the swelling using a tongue depressor will cause blanching.

This condition should be differentiated from:

Intratonsillar abscess

Peritonsillar cellulitis

Infectious mononucleosis

Odontogenic infections

Aneurysm of internal carotid artery

Intraoral ultrasound:

This can be performed under emergency sitting. It shows high degree of sensitivity and specificity. This test will help in differentiation between cellulitis and abscess in this area. It will also exclude another dangerous condition i.e. aneurysm of internal carotid artery.

Microbiology:

A mixture of aerobic and anaerobic bacteria can be isolated from the pus drained from quinsy. The common aerobic organism isolated being Streptococcus group A, beta-hemolytic streptococci group C and G and staphylococcus aureus.

The common anaerobic bacteria isolated from pus aspirated from peritonsillar infections include Fusobacterium Necrophorum. This organism is gram negative obligate anaerobic pleomorphic rod.

Pathophysiology:

Infection usually starts in the crypta magna from where it spreads beyond the confines of the capsule causing peri tonsillitis initially, and peritonsillar abscess later.

Another proposed mechanism is necrosis and pus formation in the capsular area, which then obstructs the weber glands, which then swell, and the abscess forms.

Weber's glands:

These are mucous (minor) salivary glands present in the space superior to the tonsil, in the soft palate. There are 20 - 25 such glands in this area. These glands are connected to the surface of the tonsil by ducts. The glands clear the tonsillar area of debris and assist with the digestion of food particles trapped in the tonsillar crypts. If Weber's glands become inflamed, local cellulitis can develop. Inflammation causes these glands to swell up causing tissue necrosis and pus formation i.e. the classic features of quinsy. These abscesses generally form in the area of the soft palate, just above the superior pole of the tonsil, in the location of Weber's glands.

The occurrence of peritonsillar abscesses in patients who have undergone tonsillectomy further supports the theory that Weber's glands have a role in the pathogenesis.

Management:

1. Needle aspiration if the swelling is minimal. This is more used as a proof for the present of pus before proceeding to perform incision and drainage. The pus can be sent for culture and sensitivity in order to decide on antibiotic cover that should be provided post operatively.

2. Incision and drainage:

This is performed with patient in sitting position to prevent aspiration of pus into the larynx. First the oral cavity and throat of the patient is sprayed with 4 % topical xylocaine spray to anaesthetize the mucosa.

A Saint Claire Thompson quinsy forceps, or a guarded 11 blade can be used. The 11 blade is guarded to prevent the blade from penetrating the tonsillar substance deeply and damaging underlying vital structures like internal carotid artery. Guarding can be done by applying tape over the entire length of the blade save the 3 mm tip portion which is left exposed. If a blade is used to drain quinsy then after penetrating the abscess a sinus forceps or a small curved artery forceps should be introduced via the incision and dilated in order to ensure that pus drains freely.

Site of incision:

Is commonly over the point of maximum bulge. It can also be made at the junction between a horizontal imaginary line drawn from the base of the uvula to the anterior pillar and a vertical imaginary line drawn along the anterior pillar. After incision is made a sinus forceps is introduced to complete the drainage procedure.

Six weeks after I&D tonsillectomy is performed in this patient to prevent further recurrence. This is known as interval tonsillectomy. Quinsy tonsillectomy.

3. Quinsy tonsillectomy / Hot tonsillectomy: Even though some authors advocate this procedure, it is highly risky. Bleeding will be profuse during the procedure. There is always an impending danger of septicemia due to systemic spread of infection because the natural anatomical barriers are breached during the procedure.

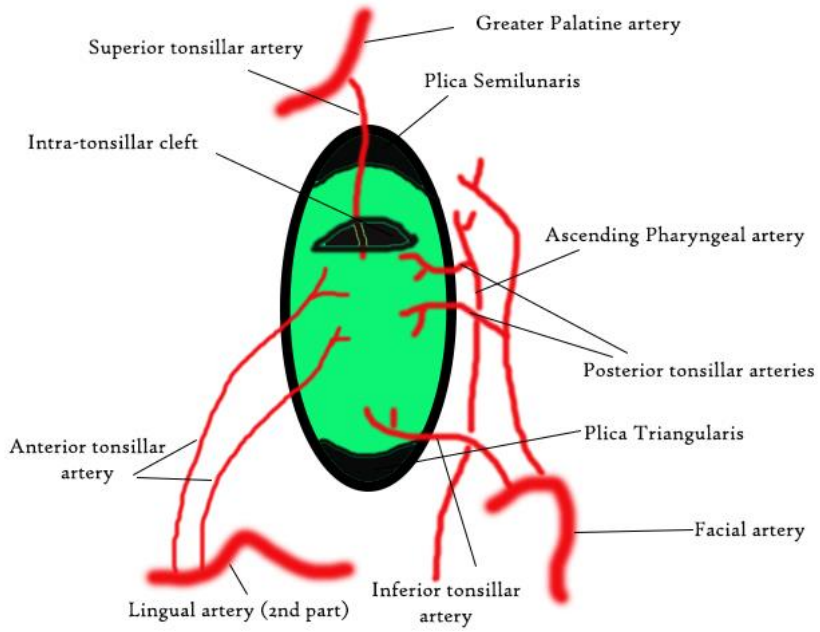

Diagram showing blood supply of tonsil

Quinsy forceps being inserted

Pus could be seen streaming out