Original Article

Peritonsillar Abscess: A New Approach for its Management

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Objective: To see the effectiveness of various treatment modalities in peritonsillar abscess.
Material and Methods: 250 patients were admitted in ENT department services hospital Lahore through emergency and opd having symptoms of unilateral severe throat pain, trismus, drolling, earache, and change of voice (hot potato voice). Patients having peritonsillitis can be differentiated from peritonsillar abscess by intraoral ultrasonography.
Results: 50 Patients having peritonsillitis are treated by IV antibiotic, pain killer and IV fluids. In patients having peritonsillar abscess needdle aspiration done in 15 patients (6%) and incision and drainage done in 85 patients (34%). In 100 patients having history of recurrent acute tonsillitis(four to five attack per year) and sleep apnea interval tonsillectomy done.
Conclusion: Peritonsillitis can be mananged conservatively. Incision drainage is gold standard for peritonsillar abscess. In tonsillectomy when indicated early interval tonsillectomy is better option than delayed interval tonsillectomy.
Keywords: peritonsillar abscess, needle aspiration, unison drainage, interval tonsillectomy.

Introduction

Peritonsillar abscess is the most common deep infection of head and neck in young adults despite the wide spread use of antibiotics for treating tonsillitis and pharyngitis.[1] Peritonsillar abscess is a complication of acute tonsillitis. Tonsillitis is the inflammation of pharyngeal tonsils.[2] In peritonsillar abscess there is pus trapped between the tonsillar capsule and lateral pharyngeal wall.[3] This infection can occur in all age groups, but the highest incidence is in adults (20-40) years of age.[4] An alternative theory suggests involvement of the Weber gland. There are groups of salivary gland, immediately above the tonsillar area, in the soft pallet. They are thought to play a minor role in clearing any trapped debris from the tonsillar area .Tissue necrosis and formation of pos produce an abscess between the tonsillar capsule, lateral pharyngeal wall and supratonsillar space. There is scarring and obstruction of the duct that drain the gland. They swell and progress to abscess formation.[5] Patients with peritonsillar abscess appear ill and present with fever, malaise, sore throat, dysphagia, or otalgia. The throat pain is more severe on the affected side and is often referred to the ear on the same side. Physical examination usually reveal trismus, with the having difficulty opening his or her mouth because of pain from inflammation and spasm of masticator muscle.[6] Swallowing is also highly painful resulting in pooling of saliva or drooling. Patients are often speaking in a muffled voice (also called "hot potato voice") **tab-1**.Cervical lymph nodes are markedly enlarged and tender on the affected side. Inspection of oropharynx reveals tense swelling and erythema of the anterior tonsillar pillar and soft pallet over lying the infected tonsil. The tonsil is displaced inferiorly and medially with contra lateral deviation of uvula **fig-1.** Causative organisms in culture showed mixed flora like streptococcus pyogenese, staphylococcus aureus, Haemophilus influenza, anaerobic organisms including prevotella spp., prophyromonas spp., and pepto strepto coccus spp.[7,8] IV antibiotic give higher blood levels than oral therapy and are usually used, Penicillin, cephalosporin's, amoxicillin + clavulanic acid and clindamycim are all appropriate antibiotics. IV fluids may be required to correct dehydration. Analgesia should be prescribed. Studies have also shown that the use of single-dose IV steroids as well as antibiotics may be beneficial. They may help to reduce symptoms and to speed recovery.[9]

Material and Method

This observational study is performed in services

Hospital Lahore in E.N.T department since January 2010 to February 2015. Mostly the patients are admitted through emergency presenting with unilateral severe pain in the throat .Some patient are admitted throughout door patient department. Mostly the patient is in the age ranging from 15 to 30 years. The diagnosis of the Peritonsillar abscess is made by history and physical examination .Differential diagnosis includes infectious mononucleosis, lymphoma, Peritonsillar cellulites and retropharyngeal abscess. In peritonsillar cellulites the capsule is edematous and erythematous, but peritonsillar abscess has not yet formed. When there is doubt about inflammation intra oral sonography can help. CT scan is needed when there is complication like retropharyngeal abscess.

Results

The treatment of patients are divided in to two groups .The first group of the patient with peritonsillar cellulites admitted in the ward and inject able antibiotics augmention 1 gram iv BD and inject able pain killer iv fluid started. In some patient flagyl in infusion form also given in two time. In patients with established abscess treatment is divided in the following modalities. In our study only 15 patients we did the needle aspiration (6%).In these patient sometimes two or three pricks needed to find the abscess. In 85 patient incisions drainage was done by our senior resident doctor who is trained in this procedure. When the abscess drained the patient gets immediately relief in trimus and pain. No complication raised in this group.Interval tonsillectomy done in patient having strong indication of tonsillectomy including those who have symptoms of sleep apnea, history of recurrent tonsillitis (four or more infection per year despite adequate medical therapy).In 50 patients where was history of recurrent tonsillitis we decided the delayed interval tonsillectomy. Patient admitted and after incision and drainage, inject-able antibiotics given for 48 hours and patient discharged, after 6 weeks patient readmitted and tonsillectomy done. However there were some difficulty in removing the tonsils and bleeding was more due to fibrosis. In 50 patients we do the early interval tonsillectomy. After admission incision and drainage done and inject- able antibiotics given for 48 hours and patient discharged. After five days when the acute inflammation settled down .tonsils are easily removed and there was no profuse bleeding and healing was also smooth.

Fig-1: Left peritonsillar abscess.

Discussion

The diagnosis of peritonsillar abscess is often made by history and physical examination .Some patient present with peritonsillitis they can be managed by conservative treatment like antibiotics, pain Killer and hydration. The main surgical procedures for the management of peritonsillar abscess are incision and drainage, needle aspiration, and immediately tonsillectomy. So in our series incision and drainage was done in 85 patients (30%). Immediate abscess tonsillectomy has not been proven to be any more effective than incision and drainage and it is considered to be less cost effective 10. The acute surgical management of peritonsillar abscess has

Table-2:

Group -1	Medical Management	Number of Patients	Percentage
Peritonsillitis	Augmentin 1.2 gram i/v BD	50	20%
Group II	**Surgical Management**		
Peritonsillar Abscess	Needle Aspiration	15	06%
	Incision/ Drainage	85	34%
	Early Interval Tonsillectomy	50	20%
	Delayed Interval Tonsillectomy	50	20%

evolved over time from routine immediate tonsillectomy to increase used of incision and drainage or needle aspiration 11.So in our Series no abscess tonsillectomy done. A case series review found no significant difference in total hospital days, blood loss, operative time, or post operative complications between immediate tonsillectomy and interval tonsillectomy in the treatment of pediatrics peritonsillar abscess12. So in our series only interval tonsillectomy done in patients having strong indications of tonsillectomy, including those who have symptoms of sleep apnea, history of recurrent peritonsillitis (four or more infection per year despite adequate medical therapy). Up to 40% of patient meets the criteria in our study. In other study this criteria of tonsillectomy was 30%11. It is our observation that early interval tonsillectomy is more favorable because tonsils are easily removed and bleeding was also less and post operative healing is smooth.

Conclusion

The patient having symptoms of Peritonsillar abscess present usually with severe unilateral throat pain, drooling and trismus. Patient having peritonsillar cellulites are managed conservatively. Peritonsillar abscess are managed by incision and drainage, needle aspiration and tonsillectomy in selected cases. Tonsillectomy is needed in up to 30% to 40% cases. When there is need of tonsillectomy, early interval tonsillectomy is best alternative instead of abscess tonsillectomy. Further studies are needed to reach the conclusion.

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