



## CASE REPORT : A RARE CASE OF BILATERAL PERITONSILLAR ABSCESS

<b>Dr. D. J. Datta</b>	MS(ENT), Senior Consultant, Downtown Hospital, Guwahati, Assam, India.
<b>Dr. Deepak Kumar S</b>	DNB Post Graduate Trainee In Ent Department, Downtown Hospital, Guwahati, Assam, India.
<b>Dr. P. Abhishek*</b>	DNB Post Graduate Trainee In Ent Department, Downtown Hospital, Guwahati, Assam, India. *Corresponding Author

**ABSTRACT** Peritonsillar Abscess occurs due to accumulation of pus in Peritonsillar space, between the pharyngeal tonsil and the Superior Constrictor muscle. Although it is known to occur unilaterally, a bilateral presentation may occur. Patient may present with a muffled voice, medial displacement of uvula, Trismus, Odynophagia or Upper airway obstruction. Although it is diagnosed clinically, a Contrast Enhanced CT scan of neck remains a gold standard imaging modality for an accurate diagnosis. The disease is managed by Incision and Drainage of the abscess along with administration of Systemic Antibiotics. In recurrent cases, the patient may need Interval Tonsillectomy after conservative management of 6 weeks.

**KEYWORDS** : Peritonsillar; Abscess; Diabetes; Incision; Drainage

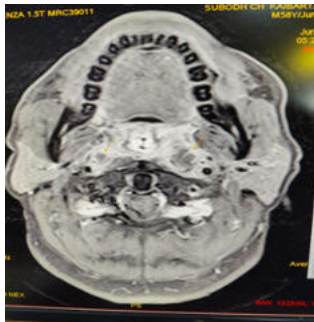
### INTRODUCTION

Peritonsillar Abscess is one of the most commonly seen neck space infection which occurs as a result of Acute Tonsillitis. It is known to occur unilaterally, but may present bilaterally in a rare situation. It is diagnosed usually by a proper clinical examination. It is treated by Incision and Drainage of the abscess along with administration of Systemic Antibiotics.

### CASE PRESENTATION

A 58 years old male patient presented with chief complaints of Difficulty in swallowing, muffled voice and swelling in left side of neck near the lower jaw since 3 days. He is a known case of Diabetes mellitus type II and Hypertension since 5 years and has been on regular treatment. At the time of clinical examination, he was conscious, coherent and well oriented to time, place and person. His Pulse rate was 86 beats/ min, Blood pressure was 140/90 mm Hg, Respiratory rate was 22 breaths/min and Temperature was 97.2°F. Examination further revealed poor orodental hygiene, halitosis, congested uvula deviated to the right right side, congested left anterior tonsillar pillar, a tender, non- fluctuant swelling in left side of soft palate and no bulge in the posterior pharyngeal wall was noted. In the left submandibular region of the neck, a 2cmx2cm diffuse, non-fluctuant, tender, immobile swelling was palpable.

His HbA1c was 15% with elevated total leukocyte count of 11,700 cells/cumm., hsCRP was >200 mg/L, Procalcitonin was 0.5ng/ml. His CEMRI showed a T2 hyperintense collection in left peritonsillar space measuring 18mmx13mm with surrounding inflammatory changes, peripheral rim enhancement and another small hyperintense collection with peripheral rim enhancement in right peritonsillar space measuring 12mmx13mm – suggestive of Bilateral peritonsillar abscess along with few bilateral subcentimetric level II lymph nodes.



**Figure 1.** Figure showing T2 image of Contrast Enhanced MRI in Axial view

Initially, he was managed conservatively with Insulin and Systemic Antibiotics. Upon seeing no improvement, an Incision and Drainage of left peritonsillar abscess was done under Local anesthesia following

which the patient developed immediate relief symptomatically. The pus that was evacuated was sent for culture and sensitivity which showed the growth of Klebsiella spp. Two days later, the patient developed pain in right side of the throat and underwent an Incision and Drainage of right peritonsillar abscess. The pus evacuated, was sent for culture and sensitivity which showed the growth of Klebsiella spp. He developed symptomatic relief within the next 48 hours. He was discharged 3 days later in a clinically stable condition.



**Figure 2.** Figure Showing Right Peritonsillar Abscess

### DISCUSSION

The Peritonsillar space lies lateral to the pharyngeal tonsil and medial to the superior constrictor muscle. It contains loose connective tissue and is the site of accumulation of pus in peritonsillar abscess, or Quinsy. Peritonsillar space abscess can directly spread to the Parapharyngeal space by direct extension, via lymph and /or blood vessels which traverse the superior constrictor muscle. Bilateral peritonsillar abscesses are rare despite unilateral peritonsillar abscesses being the most common complication of acute tonsillitis<sup>[1]</sup>. Peritonsillar abscesses affect young adults aged 20–40-years old with a male-to-female ratio of 2:1<sup>[2]</sup> which is 1.9–2.4% of reported cases of quinsy tonsillectomies.<sup>[3]</sup> Peritonsillar abscess is an accumulation of pus inside the peritonsillar space between the superior constrictor muscle and tonsillar capsule<sup>[4]</sup>. The usual symptoms of a unilateral peritonsillar abscess are sore throat associated with odynophagia, high grade fever and drooling.

It can cause upper airway obstruction with difficult operative intubation due to trismus. The most common organism cultured from peritonsillar abscesses is group A beta-hemolytic streptococci (*Streptococcus pyogenes*). In this case, the organism involved is *Klebsiella* spp. Other organisms include *Peptostreptococcus* spp, *Viridans Streptococci*, *Staphylococcus aureus* (MRSA in children) & *Staphylococcus epidermidis*. Since the 1980s, needle aspiration has been considered the primary treatment choice as it offers diagnostic and therapeutic capabilities and other medical choices are lacking.

Other treatment approaches for peritonsillar abscesses include incision and drainage or quinsy tonsillectomy. Researchers have found that these options are the most effective with lowest recurrence rates and later less need for a quinsy tonsillectomy, and that incision and drainage can be considered when needle aspiration confers no improvement.<sup>[5]</sup>

Complications of Peritonsillar Abscess include spread of infection to the Retropharyngeal/parapharyngeal spaces, mediastinum, skull base along the neck vessels, epiglottis, and larynx, which can lead to aspiration, Severe upper airway obstruction, and sleep apnea<sup>[2,6]</sup>. Systemic complications include sepsis and jugular vein thrombophlebitis<sup>[6]</sup>.

## CONCLUSIONS

Bilateral Peritonsillar Abscess is an emergency where Management of the airway should be considered as the first step in this condition. It can present without the hallmarks of unilateral Peritonsillar Abscess, such as deviated Uvula and unilateral peritonsillar bulging, which can make diagnosis difficult. Peritonsillar Abscess is usually treated with surgical drainage and antibiotics, and Interval Tonsillectomy may be considered after 6 weeks in case of recurrence. Bilateral Peritonsillar Abscess should be differentiated by radiologic examination to rule out other similar deep neck space infections, which require different management and infections approaches.

**Conflicts Of Interest:** None

**Acknowledgements:** we would like to thank Dr N N Dutta, Chairman and Managing Director of downtown hospital, Guwahati for supporting us.

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