Quinsy Tonsillectomy for peritonsillar abscess

ABSTRACT

Peritonsillitis is a common infection of throat leading to abscess formation if antibiotic therapy is not started on time. Controversy exists regarding the surgical intervention of this abscess. In Europe and US Abscess tonsillectomy is a preferred method however in India, I & D aspiration followed by interval tonsillectomy appears to be the method of choice. At our center we were following the same method but after coming across cases with deep seated abscess where I&D and aspiration could not give relief we had to contemplate doing Abscess tonsillectomy with immediate relief of symptoms. Presented here is retrospective analysis of 42 cases treated over a period of last 10 yrs.

Material and methods:

We analyzed 52 cases of peritonsillar abscess treated over a period of last 10 years. Almost all of them were in the age group of 18 yrs to 40 yrs. All the pts were advised admission and were given IV antibiotics [ceftriaxone, metronidazole and amikacin] along with analgesic, antipyretic and multivitamins with IV fluids to maintain hydration. Metronidazole was added owing to the presence of anaerobes in some of the reported studies[3,9]. In most of the cases pain and fever subsided in 24 hrs. The patients were given the choice of surgical procedure either aspiration or incision and drainage or immediate tonsillectomy. Needle aspiration and Incision and drainage were performed under surface anesthesia on opd basis and immediate tonsillectomy performed under general anesthesia in operation theatre. Once the abscess was successfully drained with immediate relief, patients were discharged with a course of oral antibiotics with analgesic and betadine gargle for a week post-operatively. Interval tonsillectomy was recommended to those in whom needle aspiration or incision and drainage was performed.

Results:

Of the 52 cases that were hospitalized 6 pts did well with medical line of treatment alone and were discharged on 3rd day with advice to take oral medication for a week. Rest of the group was given the choice of surgical intervention in the form of needle aspiration or incision and drainage or immediate tonsillectomy; we stressed the advantages of immediate tonsillectomy to all the patients. 8 pts were not willing for immediate tonsillectomy out of which 2 opted for and did well with just needle aspiration and rest of the 4 cases resolved after incision and drainage. In 2 cases both the procedure failed hence they had to go for immediate tonsillectomy eventually and both turned out to be having abscess in the deep inferior portion of the tonsil.

In the 12 cases that resolved with only medication or needle aspiration or incision and drainage, interval tonsillectomy was advised after 6 weeks. 4 did not turn up and 8 underwent interval tonsillectomy after the stipulated time.

Introduction:

Peritonsillar abscess is one of the most common abscesses of the head and neck [3, 8]. Also called as ‘Quinsy’ a term originated from Latin ‘Quinancia’ which is a medical term for any throat infection. Patients with peritonsillar abscess usually present with sore throat, fever, dysphasia and trismus. Clinically the tonsils look swollen, erythematous, edematous pillars with purulent exudates on the tonsils and contra lateral uvular deviation. Trismus and a hot potato muffled voice with cervical lymphadenopathy are seen. Peritonsillar abscess in all series reported occurs most frequently among young adults 15 to 30 year’s age group. Abscess tonsillectomy is widely performed in Europe and US whereas I and D and needle aspiration followed by interval tonsillectomy appear to be the procedure popular in India [12].

Guy de chauliac, a 14th century French surgeon, first described incision and drainage of peritonsillar abscess and Chassaignac first reported tonsillectomy a chaud [quinsy tonsillectomy] in 1859. Controversy persists about the best management of PTA. The different opinions include Aspiration, Incision and drainage, immediate tonsillectomy and interval tonsillectomy.

The reason for why ‘Quinsy tonsillectomy or Immediate tonsillectomy or Tonsillectomy a chaud’ is not so popular appears to be historically related to theoretical risks in a very ill patient with a potential for bleeding, aspiration and septicemia.[9] In fact there is rational in doing immediate tonsillectomy procedure and is proved by many studies [1,2,3,4,9,11] which include complete drainage of abscess, easy surgical dissection, minimum blood loss, relatively short recovery period, reduced likelihood of recurrence. One of the reports suggests development of complications like parapharyngeal and retropharyngeal abscess post incision and drainage leading to dreaded complications like mediastinitis and empyema [6]. This suggests possibility of incomplete drainage of abscess with incision and drainage.

I report a retrospective study comparing QT and IT with regard to 1] technical difficulty, 2] intraoperative blood loss 3] period of hospitalization.
Table 1] Comparison of interval and Quinsy [immediate] tonsillectomy:

<table>
<thead>
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<th>Parameters</th>
<th>Interval tonsillectomy</th>
<th>Quinsy or immediate tonsillectomy</th>
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<tbody>
<tr>
<td>Operative blood loss</td>
<td>50 to 100 cc</td>
<td>50 to 100 cc</td>
</tr>
<tr>
<td>Operative time</td>
<td>20 to 60 min</td>
<td>20 to 45 min</td>
</tr>
<tr>
<td>Postoperative bleeding</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Ease of surgery</td>
<td>relatively tough due to fibrosis</td>
<td>easy dissection due to readymade plane of dissection due to abscess</td>
</tr>
<tr>
<td>Difficult intubation</td>
<td>No</td>
<td>Slight trismus in few cases</td>
</tr>
<tr>
<td>Total hospital stay</td>
<td>4 to 5 days [2 admissions]</td>
<td>3 to 5 days [one admission]</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>More</td>
<td>Comparatively less</td>
</tr>
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As per the table, immediate tonsillectomy scored over interval tonsillectomy in the duration of hospitalization, no of procedures and cost effectiveness for the patient and ease of surgery and reduction of waiting list for the surgeon. There was trismus in few pts of immediate tonsillectomy however it was not difficult intubation as tube could be negotiated without any difficulty.

Table 2] Location of abscess during immediate tonsillectomy:

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Upper pole</td>
<td>28</td>
<td>70 %</td>
</tr>
<tr>
<td>Midportion</td>
<td>7</td>
<td>17.5 %</td>
</tr>
<tr>
<td>Lower pole</td>
<td>5</td>
<td>12.5 %</td>
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Those in the midportion and lower portion would have been difficult to drain through needle aspiration or incision and drainage.

Conclusion:
Immediate tonsillectomy or quinsey tonsillectomy is a safe procedure with some of the distinct advantages over needle aspiration or incision drainage with interval tonsillectomy.

1] Immediate tonsillectomy ensures complete drainage of the abscess.
2] Ease of dissection due to readymade plane formed by pus formation and fibrosis makes dissection little more difficult in interval tonsillectomy.
3] Less blood loss due ease of dissection and formation of plane of dissection.
4] Immediate complete relief of symptoms.
6] Psychological trauma of undergoing needle aspiration or incision and drainage under local anesthesia is avoided. Incision and drainage, which is also supported by many authors is an awkward procedure, very unpleasant for the patient that could often lead to incomplete evacuation of the abscess cavity. That is the reason why the procedure is often necessary to be repeated several times.
7] Avoids anxiety of failed procedure in case needle aspiration or incision and drainage are not effective. This also avoids anxiety of undergoing second procedure of interval tonsillectomy in future.

References: