

Satisfaction of Patients with Peritonsillar Abscess with Permucosal Needle Aspiration Versus Incision & Drainage

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ABSTRACT

Objective: To assess the efficacy and safety of Permucosal Needle Aspiration of Peritonsillar abscess with the Incision & Drainage.

Study Design: Prospective, descriptive study

Place and Duration of Study: This study was conducted at Benazir Bhutto Shaheed Teaching Hospital, Abbottabad from July 2011 to June 2014.

Materials and Methods: This study was conducted on 62 patients, suffering from Peritonsillar Abscess. Patients were divided into 02 groups, group A, patients who were treated by Needle aspiration and group B, patients who were treated initially by incision & drainage. Patients were assessed for relief of pain, hospital stay, complications of the procedure, recurrence of the disease and success rate of the procedure.

Results: Of the 62 patients, 38 (61.29%) were male and 24 (38.70%) were female. The age range was from 08 years to 57 years. Duration of symptoms prior to hospital admission was 06 days. The return to semi solid food was 02 days in group A and to solid food 04 days. Where as in group B 88 % return to semisolid in 02 days and to solid in 04 days. 75% the patients in group A were pain free after 05 days as compared to 78 % in group B. The hospital stay was 3-9 days in group A and 4 -10 days in group B patients. The over all success rate was 90 % in group A and 93 % in group B.

Conclusion: This study indicates that most patients with peritonsillar abscess can be treated successfully and safely by per mucosal needle aspiration.

Key Words: Peritonsillar Abscess, Needle Aspiration, Incision & Drainage

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INTRODUCTION

Peritonsillar abscess is the most common deep infection of the head & neck. It is most common in persons 20- 40 years of age. Young children are seldom affected, unless they are immune compromised⁽¹⁾. It is most common in November to December and April to May, coinciding with the highest incidence of streptococcal pharyngitis and tonsillitis⁽²⁾. An average ENT department treats 29 cases of peritonsillar abscess per year in UK⁽³⁾.

The infection affects male and female equally. Evidence shows that chronic tonsillitis or multiple trials of oral antibiotics for acute tonsillitis may predispose persons to the development of Peritonsillar abscess⁽⁴⁾.

The most common organisms associated with Peritonsillar abscess are Aerobic (streptococcus Pyogens, Staph. Aureus, Haemophilus influenza, Neisseria species) and Aerobic (Fuso bacterium, Peptostreptococcus, Prevotella and Bacterioids).

Peritonsillar abscess in the absence of tonsils is rare. Peritonsillar abscess is mildly contagious. The infection spreads from person to person through saliva and nasal discharge. The recurrence rate is 10-15%.

The clinical features are progressive worsening of sore throat, often localized to one side, otalgia, dysarthria and high grade fever. In addition many patients will have a thickened, muffled voice, often described as having a "Hot potato" quality.

A distinguishing feature on physical examination, is the inferior medial displacement of the affected tonsil with a contra lateral deviation of the uvula. Trismus, edema of the palatine tonsils, purulent exudates on tonsils and cervical lymphadenopathy are also present. A thorough history and physical examination can often determine a diagnosis of Peritonsillar abscess, but radiological tests may be helpful in differentiating Peritonsillar abscess from other diseases. Ultrasonography is the easiest and most useful tool⁽⁵⁾. The use of CT scan may also be helpful in identifying an abscess formation.⁽⁶⁾

The differential diagnosis include Peritonsillar cellulitis, Tonsillar abscess, Glandular fever, Cervical adenitis, Dental infection, Salivary gland infection, mastoid infection, Aneurysm of internal carotid artery and Neoplasm (Lymphoma, Leukemia).

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Peritonsillar abscess is almost always unilateral but occasionally can be bilateral.⁽⁷⁾

The treatment of Peritonsillar abscess requires both the selection of appropriate antibiotics and the best procedure to remove the abscess material. The choice of antibiotics depends both on the gram stain and culture of the fluid obtained from the abscess cavity.

The use of steroids has been controversial. The addition of a single dose of dexamethasone to parenteral antibiotics has been found to significantly lessens the variables of hours hospitalized, throat pain, fever and trismus.

Three main surgical procedures are available for the treatment of Peritonsillar abscess, Needle aspiration, Incision & Drainage, and immediate tonsillectomy.

Controversy remains over the necessity of I/D and Needle aspiration. Most experts agree that immediate tonsillectomy is not required for treatment of Peritonsillar abscess. Tonsillectomy should be performed 3-6 months after Peritonsillar abscess in patients who have recurrent tonsillitis or Peritonsillar abscess.

The aim of this study is to compare the safety and efficacy of Per mucosal Needle aspiration with that of incision drainage of Peritonsillar abscess.

MATERIALS AND METHODS

A randomized, prospective, clinical study, in which 62 patients were evaluated, between 08 to 57 years of age. There were 38 male and 24 female patients.. The study was conducted at Benazir Bhutto Shaheed teaching Hospital Abbottabad, from July 2011 to June 2014.

All patients were clinically diagnosed for Peritonsillar abscess. A printed Performa was used for each patient to record age, sex, presenting complaints and the clinical findings and the treatment outcome.

All patients were divided into two groups. Patients in Group A were treated as Needle aspiration and patients in group B were treated by Incision & Drainage under local anesthesia. Both procedures were performed in OT under aseptic technique.

The patient's subjective complaint regarding post-procedure pain, oral intake and hospital stay were recorded.

RESULTS

A total of 62 patients were studied. Out of which 38 (61.29%) were male and 24 (38.70%) were female, with a mean age of 32.4 years (range 08 - 57 years) (Figure 1).

The average duration of symptoms prior to presentation was 06 days, with 84 % treated with antibiotics prior to presentation. All patients were admitted to hospital for intra- venous antibiotic, analgesics and intra-venous fluid.

The initial success rate was 90 % (29 out of 32) with needle aspiration and 93% (30 out of 32) with I/D.

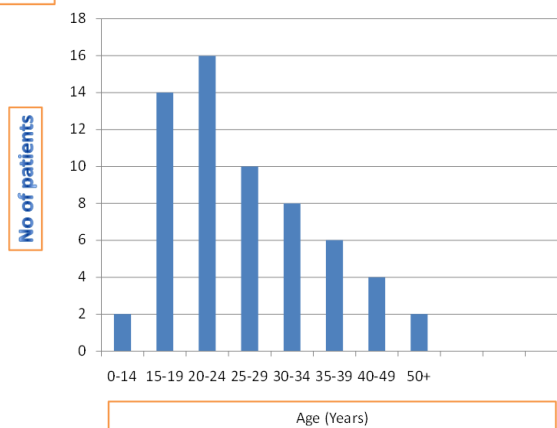


Figure No.1:

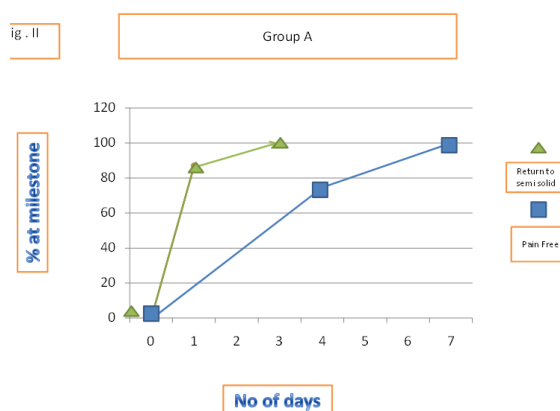


Figure No.2:



Figure No.3:

The aspiration was repeated in 02 patients as there were no improvement in first 24 hours.

In group A, 87% reported a return to semisolid food within 02 days, and solid food within 04 days. (Figure 2).

75% reported in this group no pain by 05 days. 88% in group B, reported a return to semisolid food within 02 days and solid food in 04 days.

78% of patients in this group, reported no pain by day 5 (Figure 3).

The hospital stay was 3-9 days for group A, and 4-10 days for group B patients.

DISCUSSION

Peritonsillar abscess is one of the most commonly occurring infection of the Head & neck in adults and children.

The reported incidence of Peritonsillar abscess varies in the current literature, but recent review suggests that it affects approximately 30% in every population of 100,000, and 40,000 new cases are reported every year.⁽⁸⁾ The condition usually presents unilaterally and affects any age group from 10 to 60 years, but is most common in the age group of 20 to 40 years.⁽⁹⁾ Peritonsillar abscess can be a life threatening disease and may lead to significant complications without treatment. Death can occur through rupture into the airway, dissection into the carotid artery, or regional spread of infection leading to sepsis.

Three main surgical procedures are available to treat Peritonsillar abscess, Needle aspiration, Incision & drainage and immediate tonsillectomy. An abscess tonsillectomy is the treatment of choice in Europe and USA, but it is contraindicated in Japan.⁽¹⁰⁾ The risk of bleeding following abscess tonsillectomy seems higher (13%), than reported in elective cases.⁽¹¹⁾

In this study the author compared the results of incision & drainage and needle aspiration of Peritonsillar abscess.

Needle aspiration can be carried out in children as young as 07 years, especially if conscious sedation is used.

In a study by Stringer et al, No significant difference was observed between the two groups in duration of symptoms or initial treatment failure.⁽¹²⁾

Mahraj et al reported similar (87% in needle aspiration, and 90% in I/D group) results.⁽¹³⁾

This study indicates that most patients with Peritonsillar abscess can successfully and safely be treated by per mucosal needle aspiration.

CONCLUSION

This study indicates that Peritonsillar abscess can be successfully and safely be treated with per mucosal

needle aspiration.

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