

# PREVALENCE OF INFECTION IN TONSILLAR SURGERY

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## ABSTRACT

**Objectives:** To know the prevalence of infection in post tonsil ting patients.

**Material and Methods:** This case series study was conducted in the ENT Department of Khyber Teaching Hospital, Peshawar for a period of 03years from June 2009 to June 2012. The total number of patients studied were 360. Convenienc sampling was done and patients were divided into two groups. Group A comprised 180 patents who were given broad spectrum penicillin's in oral form Group B comprised 180 patients with no antibiotics given postoperatively, while anti inflammatory medicines were give to both of the groups.

**Results:** 120 adult males and 240 adult females were included. Age range was 12-35 years. Post operatively 20(5.5%) of patients in group A had secondary hemorrhage whereas in group B 30(2.3%) patients had secondary hemorrhage .In 15(4.1%) patient in group A had infection of tonsillar fossa while in 18(5.0%) of Group B suffered post operative infection.

**Conclusion:** Strict adherence to sterilization techniques should reduced the postoperative infection burdens after tonsillar surgery.

**Key Words:** Antibiotics tonsillectomy, Complications, post operative.

## INTRODUCTION

The history of pyrexia, sore throat and constitutional upset can be symptoms of acute tonsillitis and all these can lead to significant ill ness. Mild sore throat or discomfort in the throat arising from tonsil do not constitute an indication for tonsillectomy<sup>2</sup>. When in doubt, the patient should be examined in acute attack mostly in children and in adults as well recurrent tonsillitis episodes per year & more then 07 episodes per three years can be an indication for tonsillectomy<sup>3</sup>. Other indications include recurrent quinsy and sleep apneas syndrome The operation can be used as an approach to glossopharyngeal neurology and trimming of enlarged styloid process which comprised the Eagle syndrome<sup>4</sup>. Tonsillectomy is also done to diagnose tuberculosis, lymphoma and carcinoma<sup>5</sup>. In patients with known bleeding disorders, the advisability for surgery must be discuss with the patient and hematologist. Patient on oral contraceptives are advised to stop the medications six weeks prior to procedure. Acute Infection of tonsils increases the risk of hemorrhage and pulmonary complications<sup>6</sup>. In some of the countries antibiotics are not used postoperatively in routine<sup>7</sup>, While in our setup and some other countries they are routinely used as fear of infection and its

sequela<sup>8</sup>. Tonsillectomy by dissection method is a standard procedure in this part of the world. This procedure was previously done by guillotine method and in some of the advance centers, it is done by harmonic scalpel and collation method. Endoscopic microdebrider tonsillectomy and by laser method are gaining popularly in the developed countries with the advantage of minimum operative, bleeding, decreased operating time and less post operative pain<sup>9</sup>. This study was conducted to know the postoperative morbidity without using antibiotics in tonsillar surgery.

## MATERIAL AND METHODS

This study was carried out in the ENT Department of Khyber Teaching Hospital, Peshawar. The study period was from June 2009 to June 2012. The total number of patients studied were 360. Patients were divided into two groups .Group A included 180 patients of both sexes with an age range of 5 years to 30 years. These patients were given broad spectrum penicillin's syrup according to the weight of the patient, in equal doses 4 times a day in addition to anti inflammatory drug Ibuprofen. Group B also comprised of 180 patient who were not given postoperative antibiotics, The patients in both the groups were followed after 24 hrs, 72 hrs and after 01 week.

Pre-operatively all the patients were evaluated for recent upper and lower respiratory tract infection, Patients who had bleeding disorders, cardiopulmonary and other illnesses not fit for the general surgery were excluded from the study. Patients on follow up visits were evaluated for postoperative infections.

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## RESULTS

240 adult patients of both the sexes were included. The age range was from 12-35 years with a mean age of 23.6 + 2years . The maximum number of patients i.e 200(83.3%)were in the range of 21-25 years ,followed by 12-16 years (15.3%)The distribution of secondary hemorrhage is showing Table 1. The percentage of infection is showing Table 2.

**Table 1: Distribution of secondary hemorrhage**

Groups	No. & %age of secondary Hemorrhage
Group A	20(5.5%)
Group B	30(8.3%)

**Table 2: Distribution of Infection in patients**

Groups	No. of patient with %age
A	15(4.1%)
B	18(5.0%)

## DISCUSSION

Tonsillectomy by dissection method is a Universal procedure and can be carried out with blunt dissection or with diathermy and if facilities are available with laser<sup>10</sup>.New advances in the form of bipolar scissor dissection, Microdebride harmonic scalpel developed with the hope of better results in tonsillectomy<sup>11</sup>.

The technique influences the risk of post operative morbidity<sup>12</sup>. Tonsillectomy is a common and universal procedure performed for recurrent tonsillitis in children as well as in adults. Complications like hemorrhage can occur and postoperative morbidity could be significant. Several studies have been done to see the postoperative morbidity by using either a single dose of per-operative antibiotic or post operative antibiotic therapy for several days but still controversy exists. Some have recommended no use of antibiotic therapy post operatively<sup>13</sup>. While others found the use of antibiotic useful<sup>13</sup>. This contrasts to our study results where the rate of infection is minimal in both the groups.

In this study, the blunt dissection method was used for tonsillectomy, the haemostasis being secured by with bipolar diathermy or size 0 black silk suture when required. In a study of mautagve ML et al<sup>14</sup>, the incidence of reactionary hemorrhage was 1% and 1.5% each.

The incidence of infections was 4.1% and 5.0% in group A and B each, which was controlled by systemic antibiotics. This is in contrast to other

studies where the incidence of secondary hemorrhage was 2.17% in a study by Dawan A et al<sup>15</sup> and negligible in other studies<sup>16</sup>.

## CONCLUSION

If proper aseptic operation theatre protocols are observed, the use of post operative antibiotics is not needed, reducing the financial burden to the patients.

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