



TONSILLECTOMY; COMPARING THE EFFECTIVENESS OF DISSECTION AND DIATHERMY TONSILLECTOMY

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ABSTRACT... Objective: To compare the effectiveness of dissection and diathermy tonsillectomy in children and adults. **Study Design:** Comparative, interventional study. **Setting:** ENT Department of Peoples University of Medical and Health Sciences (For women) Nawabshah (SBA). **Period:** January 2009 to December 2011. **Methods:** 100 Patients of both genders, age ranging between 6 to 35 years, divided in two equal half as groups A and B according to surgical procedures were included in study. In group A, Electro diathermy tonsillectomy was done, while in group B dissection tonsillectomy was applied. **Results:** In group A, Electro diathermy tonsillectomy group, postoperative moderate to severe pain, thick slough oedema referred otalgia and haemorrhage was seen. 07 Patients developed secondary haemorrhage while in group B postoperative mild to moderate pain was seen. Only 02 Patients developed secondary haemorrhage in group B. **Conclusion:** Dissection Tonsillectomy is the best procedure in children and adults till yet.

Key words: Tonsillectomy, Dissection method, Diathermy, Post-operative pain, Post-operative haemorrhage

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INTRODUCTION

Tonsillectomy is one of the most common surgical procedure performed in nearly 530,000 children younger than 15 years in U.S annually¹. The overall morbidity rate is 2% to 4% however mortality is one in the 15,000.¹⁻² The American academy of otolaryngology recommends tonsillectomy in patient with chronic recurrent tonsillitis.³⁻⁴ different technique used for tonsillectomy that include dissecting method, scalpel method, electrocautery, radio frequency ablation, laser, thermal welding.⁴⁻⁵

Numerous comparative studies have been done on diathermy and dissection method that showed variable results.⁵⁻⁶ Common postoperative morbidity of tonsillectomy operations are pain and haemorrhage. haemorrhage after tonsillectomy operation is potentially a lethal complication.⁷⁻⁸ Therefore the aim of our study is to compare the two procedure i.e diathermy and dissection method of tonsillectomy to determine the postoperative morbidity in children and adult.

METHODS

This study carried out at Otorhino Laryngology (ENT) Department of Peoples University of Medical and Health Sciences (PUMHS) Nawabshah. Duration of study was January 2009 to December 2011. 100 consecutive patients of both genders, age ranging 6 to 35 years were included in study. Majority of patients were in the age group of 11 to 21 years. All patients were selected from OPD of ENT Department of PUMHS, Nawabshah. These patients admitted for tonsillectomy, routine assessment was done. Inclusion criteria of patient was chronic tonsillitis both children and adult age group. The patients with acute infection, bleeding diathesis, uncontrolled hypertension, tuberculosis, diabetes mellitus, pregnant women, were excluded from the study. The object of our study was to compare the effectiveness of diathermy and dissection tonsillectomy in children and adults. We divided our patient in two equal half group A and B, according to surgical procedure. In each group 35 patients were male and 15 female. In group A, Electro

diathermy tonsillectomy was done, while in group B dissection tonsillectomy was applied.

In both groups postoperative pain, thick slough, edema referred otalgia, and haemorrhage were studied. Pain scale was divided in three grades, i.e. mild, moderate & severe. The mild degree pain patients can take meal easily. In the moderate degree of pain patients there was difficulty in swallowing. In sever degree pain, patient was unable to swallow.

Haemorrhage was again divided in three degrees. The mild haemorrhage was controlled with antiseptic or hydrogen peroxide gargle while moderate haemorrhage was controlled with medicine and antiseptic gargle. The severe haemorrhage when occur was controlled by surgical intervention with or without blood transfusion. Majority of patients were discharged after 3 days. All patients were kept on liquid and soft diet. All patients were prescribed antibiotic, analgesic and antiseptic gargles for 10 days.

RESULTS

In our study tonsillectomy was performed on 100 patients aged between 6 to 35 years. Summaries

Table-I.

Age of group	Number of cases	Percentage
6 to 10 years	20	20%
11 to 16 years	30	30%
17 to 21 years	30	30%
22 to 35 years	20	20%

Table-I. Age Distribution (N=100)

The mild degree pain was present in 15 patients and moderate pain was present in 20 patients. Sever pain was seen in 15 patients with referred otalgia in Electro diathermy tonsillectomy. While in dissection tonsillectomy 35 patients were having mild pain, in 15 patients moderate degree of pain was recorded.

Chronic tonsillitis was the commonest indication for surgery, out of 50 patients 07 patients had secondary haemorrhage and 02 patients having reactionary haemorrhage and 20 patients having thick slough with diathermy tonsillectomy, along with oedema, sever pain, thick slough. While in dissection tonsillectomy only 02 patients of secondary haemorrhage and 1 patient of reactionary haemorrhage and 05 patients with thick slough were recorded (Table II-V).

Operative Technique	Reactionary Haemorrhage	Secondary Haemorrhage	Percentage
Electro diathermy tonsillectomy	02	07	18%
Dissection Tonsillectomy	01	02	6%

Table-II. Postoperative Complications

Operative Technique	Mild Haemorrhage	Moderate Haemorrhage	Sever Haemorrhage	Percentage
Electro diathermy tonsillectomy	02	07	Nil	18%
Dissection tonsillectomy	01	02	Nil	6%

Table-III. Severity of Haemorrhage

Operative Technique	Mild	Percentage	Moderate	Percentage	Severe	Percentage
Electro diathermy tonsillectomy	10	20%	20	40%	20	40%
Dissection tonsillectomy	35	70%	15	30%	Nil	Nil

Table-IV. Severity of Pain

Operative Technique	No .of Patient	Percentage
Electro diathermy tonsillectomy	20	40%
Dissection tonsillectomy	5	10%

Table-V. Thick Slough

DISCUSSION

Tonsillectomy is a commonly performed surgical procedure that involves removal of the palatine tonsils.⁸⁻⁹ In Tonsillectomy morbidity may be haemorrhage, pain, fever and poor oral fluid intake those all possible effects of surgery.¹⁰⁻¹¹ Several operative methods are in use but all technique has been reported as unsatisfactory.¹²⁻¹³ In several frequently practiced techniques dissection tonsillectomy is one method still frequently used.¹⁴⁻¹⁵ In our study we compared two techniques, dissection tonsillectomy and diathermy tonsillectomy. Over all post tonsillectomy, haemorrhage, pain, oedema, thick slough, referred pain was high in diathermy tonsillectomy, while all these morbidities were very low in dissection tonsillectomy, these findings were in agreement with the findings of Ahmed M et al.⁸ The incidence of haemorrhage in our study was in consistent with results of other studies, who reported 6%¹⁶⁻¹⁷ in dissection tonsillectomy and 0-33%¹⁸⁻¹⁹ in diathermy tonsillectomy. Postoperative bleeding, pain, fever and infections are complication of both techniques but we found that the dissection tonsillectomy technique is a more safe and effective method in our setup.

CONCLUSION

Dissection tonsillectomy is safe and best procedure in children and adult still now.

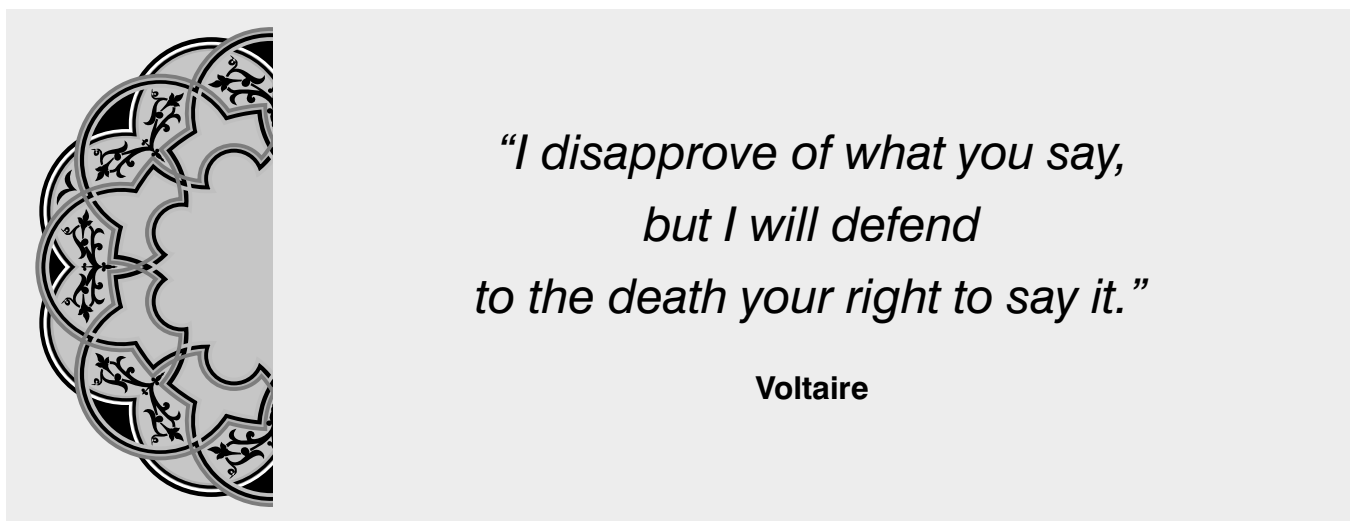
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AUTHORSHIP AND CONTRIBUTION DECLARATION

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