

A Study on Post-Operative Complications of Tonsillectomy

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Abstract: Tonsils are the local aggregation of lymphoid tissue in the surrounding mesenchyme. It is present as a part of Waldeyer's ring and acts as a primary defence mechanism. A pair of palatine tonsils is present on each side of the pharyngeal inlet. It is the first line of defence. The problem is it gets inflamed very often in the young individuals. The most common mode of treatment is the surgical approach. Very few complications are present as it is considered to be very safe procedure. But it is not impossible to face the complications. So this study is dedicated to find the same and help the practicing fraternity of ENT.

Keywords: Palatine tonsil, Surgical approach, ENT, Complication, Hemorrhage

1. Introduction

Tonsillectomy involves the surgical removal of the palatine tonsils from its bed the tonsillar fossa¹. Tonsils are a pair of lymphoid organs located in the oral cavity on either sides between the two pharyngeal pillars, the anterior and posterior pharyngeal pillars in a fossa called the tonsillar fossa. Also called as Palatine tonsil it is a part of Waldeyer's ring that form a ring of lymphoid system around the entry of aero-digestive pathway and is involved with immune functions. They form a part of the body first line defence mechanism guarding the oral cavity. Because of their function and location they are frequently subjected to infection which is majority of the times self-limiting².

Tonsils get involved in various conditions causing their enlargement can cause medical problems for which tonsillectomy is indicated

a) Infective

- Recurrent Acute tonsillitis,
- Chronic tonsillitis,
- Recurrent tonsillitis associated with cardiac & renal conditions
- Peri tonsillar abscess,
- Diphtheria

b) Obstructive

- Obstructive Sleep apnoea,
- Snoring
- Adenotonsillar hypertrophy

c) Malignancy

- Lymphomas

There has been certain guidelines set for performing tonsillectomy which have been revised by the American Academy of Otolaryngology & Head and Neck Surgery (AAO-HNS)

The procedure of tonsillectomy can be done in numerous ways. Each of this technique has its own advantage but by and large gives good results. Some of the techniques practiced today include:

- Guillotine

- Dissection using Snare
- Electrocauterisation
- Laser dissection (CO2, KTP)
- Coblation
- Microdebrider

As any other surgical procedure is associated with a risk of complications tonsillectomy also is associated with risk of few complications. The various complications that can be seen are as follows:

a) Haemorrhage

- Intraoperative
- Primary
- Secondary

b) Other complications

- Otagia
- Dehydration
- Airway obstruction
- Pulmonary oedema
- Dental problems
- c) Rare complications
- Velopharyngeal insufficiency
- Stenosis
- Rupture of an undiagnosed aneurysm
- Temporo-mandibular joint (TMJ) dysfunction
- Cervical spine injury

This study is undertaken to find out the post-operative complications of tonsillectomy in our institute

Aims and Objectives

To study on post-operative Complications of tonsillectomy.

2. Materials and Methods

One hundred patients were selected who were operated for tonsillitis and this was taken in as the sample size.

This study was done in the Department of ENT, Travancore Medical College, Kollam.

This study was done from January 2015 To January 2016 .

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Detailed clinical history was taken and the clinical examination was conducted. The patients underwent elective surgical procedure.

The complications were noted and reported.

Inclusion Criteria

- 1) All the patients were aged below 20 years

Exclusion Criteria

- 1) 20 years age were excluded.
- 2) Any associated disease was not considered.
- 3) Already complicated cases were not considered.

3. Results

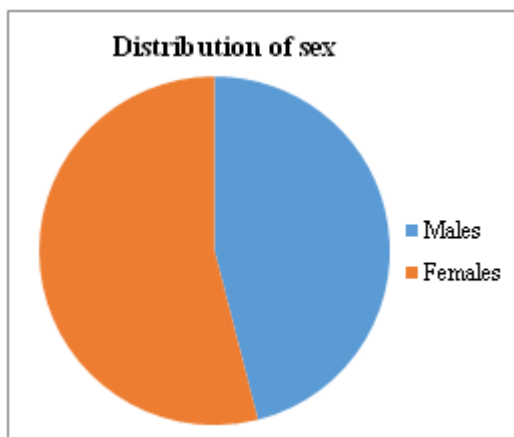


Image 1: Distribution of sex.

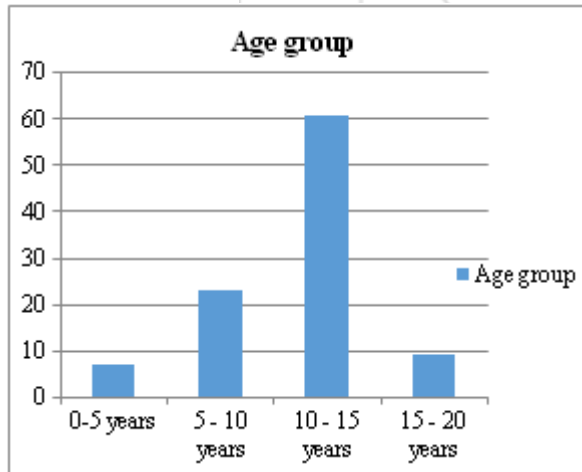


Image 2: Age group

Table 2: Complications.

complication	Frequency
Intra – operative hemorrhage	4
Primary hemorrhage	19
Secondary hemorrhage	7
Otalgia	6
Dehydration	28
Airway obstruction	02
Pulmonary oedema	Nil
Dental problems	21

Table 3: Rare Complications:

Rare complications	Frequency
Velopharyngeal insufficiency	2
Stenosis	1
Rupture of an undiagnosed aneurysm	Nil
Temporo-mandibular joint (TMJ) dysfunction	1
Cervical spine injury	Nil

4. Discussion

Haemorrhage is the commonest and most feared complication as in any other surgery. Haemorrhage can be intraoperative or it can be primary haemorrhage (2-3%) when it occurs within 24hours following surgery. Secondary haemorrhage is seen after 24 hours of surgery upto 7days. Intraoperative haemorrhage occurring can be controlled by applying pressure to the site. Electrocautery can also be used at the tonsillar bed to stop bleeding³.

Primary haemorrhage occurs postoperative and has to be attended immediately. Accumulation of blood or a massive haematoma can block the upper airways and cause respiratory insufficiency. (9.4%). The site must be carefully examined for any bleeders and should be stopped by ligation or pressure or diathermy. Careful examination also should be made to look for slippage of ligatures. If any problems are anticipated the patient should be shifted to the operation theatre for further management which includes ligation of the external carotid artery. Secondary haemorrhage (2.6%) can occur due to various complications most important of which is infections⁴.

Other complications are relatively less in number. Dehydration is seen due to pain due to lack of water intake. TMJ problems arise due to the surgery as the mouth is kept wide open or due to improper methods that are followed. Improper techniques can also cause cervical spine injuries and rarely death is seen as anaesthetic complication or excessive haemorrhage⁵.

5. Conclusion

It is quite a safe procedure and is one of the best modes of treatment available. The complications are rare but not impossible. This study puts in a sincere effort to know the complications. This study is intended to make the practicing ENT surgeons understand the complications, so they would be ready to deploy the effort in a more refined way.

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