

ORIGINAL RESEARCH

Assessment of complications of tonsillitis in a tertiary care hospital in Haryana

Saloni Sinha¹, Rahul Kumar Bagla², Rajesh Ranjan³

¹Assistant Professor, Dept. of ENT, World College of Medical Science and Research, Jhajjar, Haryana, India

²Assistant Professor, Department of ENT, Government Institute of Medical Sciences, Greater Noida, U.P, India.

³Professor, Dept. of Community Medicine, Noida international institute of medical sciences, Greater Noida UP, India,

Correspondence:

Dr.SaloniSinha

Assistant Professor, Dept. of ENT, World College of Medical Science and Research, Jhajjar, Haryana, India

ABSTRACT

Background: Tonsillitis is inflammation of tonsils, a common clinical condition caused by either bacteria or viral infection. The present study was conducted to assess complications of tonsillitis in a tertiary care hospital in Haryana.

Materials & Methods: 87 patients of tonsillitis of both genders were enrolled. A thorough examination was carried out. Clinical features and complication of tonsillitis was recorded

Results: Out of 87 patients, males were 40 and females were 47. The most common clinical features were sore throat in 75, fever in 24, dysphagia in 65, cough in 32 and lymphadenitis in 19. The difference was significant ($P < 0.05$). Complications were peritonsillar abscess in 15, rheumatic fever in 4 and acute glomerulonephritis in 2 patients. The difference was significant ($P < 0.05$).

Conclusion: Most common complications of tonsillitis were peritonsillar abscess, rheumatic fever and acute glomerulonephritis.

Key words: Acute glomerulonephritis, Peritonsillar abscess, Rheumatic fever

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INTRODUCTION

Tonsillitis is inflammation of tonsils, a common clinical condition caused by either bacteria or viral infection. ENT-related diseases in children is major outdoor burden in pediatric population. Fortunately, the mortality is very low but the rate of complications is still on the rise. It affects significant percentage of population more so in children.¹ The condition can occur occasionally or recur frequently. Acute tonsillitis is characterized by visible white streaks of pus on tonsils and the surface of the tonsils may become bright red tonsillitis is caused mainly by β Streptococcus, called strep throat and to lesser extent by Staphylococcus aureus and several other bacteria. The more common symptoms of tonsils are sore throat, red swollen tonsil, fever, pain, cough, headache etc.²

Diagnosis of acute tonsillitis is clinical, and it can be difficult to distinguish viral from bacterial infections.³ Rapid antigen testing has a very low sensitivity in the diagnosis of bacterial tonsillitis, but more accurate tests take longer to deliver results. Bacteria are cultured

from few people with tonsillitis. Other causes include infectious mononucleosis from Epstein-Barr virus infection, cytomegalovirus, toxoplasmosis, HIV, hepatitis A, and rubella.⁴ It remains unclear when tonsillectomy should be performed as opposed to standard conservative treatment, i.e., watchful waiting with/without analgesics or antibiotic treatment. Nevertheless, in cases of chronic or recurrent tonsillitis, tonsillectomy has proven to be an important intervention to improve the patient's health-related quality of life (HRQoL).⁵ These patients do not only suffer from tonsil-related symptoms. They also report more healthcare visits and more days absent from school or work.⁶ The present study was conducted to assess complications of tonsillitis in a tertiary care hospital in Haryana.

MATERIALS & METHODS

The present study comprised of 87 patients of tonsillitis of both genders. The consent was obtained from all enrolled patients.

Data such as name, age, gender etc. was recorded. A thorough examination was carried out. Clinical features and complication of tonsillitis was recorded. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 87		
Gender	Males	Females
Number	40	47

Table I shows that out of 87 patients, males were 40 and females were 47.

Table II Assessment of clinical features

Clinical features	Number	P value
Sore throat	75	0.91
Fever	24	
dysphagia	65	
cough	32	
lymphadenitis	19	

Table II, graph I shows that most common clinical features were sore throat in 75, fever in 24, dysphagia in 65, cough in 32 and lymphadenitis in 19. The difference was significant (P < 0.05).

Graph I: Assessment of clinical features

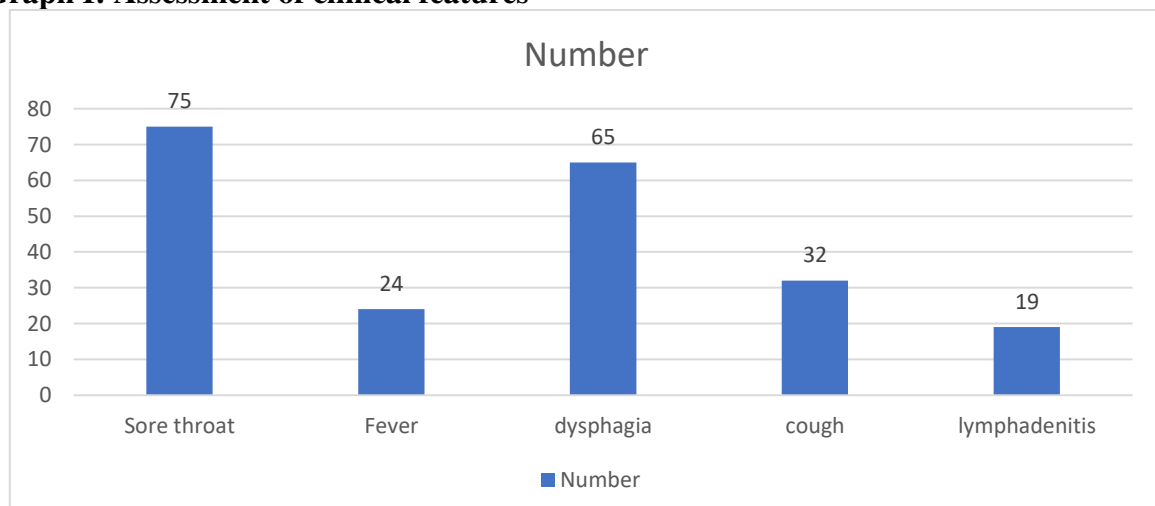


Table III Assessment of complications

Complications	Number	P value
Peritonsillar abscess	15	0.02
Rheumatic fever	4	
Acute glomerulonephritis	2	

Table III, graph II shows that complications were peritonsillar abscess in 15, rheumatic fever in 4 and acute glomerulonephritis in 2 patients. The difference was significant ($P < 0.05$).

DISCUSSION

Tonsillitis may occur in isolation or as part of a generalised pharyngitis. The clinical distinction between tonsillitis and pharyngitis is unclear in the literature and the condition is often referred to simply as 'acute sore throat'.⁷ A sore throat lasting for 24 to 48 hours as part of the prodrome of minor upper respiratory tract infection is excluded from this definition.^{8,9} Diagnosis of acute tonsillitis is primarily clinical, with the main interest being in whether the illness is viral or bacterial — this being of relevance if antibiotics are being considered.¹⁰ The present study was conducted to assess complications of tonsillitis in a tertiary care hospital in Haryana.

We found that out of 87 patients, males were 40 and females were 47. Vijayashree MS et al¹¹ found that the occurrence of acute tonsillitis with respect to population distribution was found to vary differently. Among the reported age groups, maximum tonsillitis cases were observed in the preteen age group (6-12 years) with 61% followed by teen age groups (12-18 years) 20%, children (4-5 years) 10% and the least incidence of 9% in youth (19-30 years). The distribution of tonsillitis was more in males patients (55%) compared to female patients (45%). As for as socioeconomic condition concerned, 61% of cases were observed in low-income group, 35% in middle income group and a lowest occurrence of 4% in high income group. The occurrence of symptoms indicated that sore throat was observed in all the patients, fever in 73%, odynophagia in 36% and constitutional symptoms in 45% of the patients. It was also observed that 59% of the patients exhibited acute paranchymatous tonsillitis signs, 40% acute follicular signs and only one per cent of the patients had acute membranous tonsillitis. The palpable tender digastrics lymph node was observed in 70% of the cases studied.

We found that most common clinical features were sore throat in 75, fever in 24, dysphagia in 65, cough in 32 and lymphadenitis in 19. Hackenberget al¹² determined the health utility for different states of tonsillar infections. Hospitalized patients with acute tonsillitis or a peritonsillar abscess were asked about their HRQoL with the 15D questionnaire. Patients who had undergone tonsillectomy were reassessed six months postoperatively. In total, 65 patients participated in the study. The health states of acute tonsillitis and peritonsillar abscess had both a utility of 0.72. Six months after tonsillectomy, the mean health utility was 0.95.

We found that complications were peritonsillar abscess in 15, rheumatic fever in 4 and acute glomerulonephritis in 2 patients. Sarode et al¹³ recorded prevalence and outcome of chronic tonsillitis at ENT inpatient department. Out of total 510 ENT inpatient department 90 patients were having chronic tonsillitis, of these 90; 42 patients have indication of surgery and rest of the patients were managed conservatively and at the time of Discharge the, complications; outcome of the patient were recorded. All the necessary data was collected using, pretested, semi-structured questionnaire. Most common age of tonsillitis found to be 11-21 (56%); 21-30(20%). Proportions of Male were more (61.96%) as compared to Females i.e. (38.03%). The most common complication following tonsillectomy was Hematoma (28.58%) followed by Fever (26.19%); Odynophagia (23.80%); Sore throat (14.28%); Uvular Edema (4.76%); Eustachian tube injury (2.38%). The most common complications following tonsillectomy was Hematoma (28.58%) followed by F Uvular Edema (4.76%); Eustachian tube injury

(2.38%). The chronic tonsillitis was common in the age group of in age group 11-21 year, common complications after tonsillectomy were Hematom Uvular Edema; Eustachian tube injury.

CONCLUSION

Authors found that most common complications of tonsillitis were peritonsillar abscess, rheumatic fever and acute glomerulonephritis.

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