(e) ISSN Online: 2321-9599

(p) ISSN Print: 2348-6805

ORIGINAL ARTICLE

Evaluation of cases of tonsillitis & their complications

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ABSTRACT:

Background: Inflammation of the tonsils, or tonsillitis, is a common clinical illness that can be brought on by a viral or bacterial infection. The present study was conducted to assess tonsilitis and their complications. **Materials & Methods:**90 patients of tonsilitis of both genders were selected. A thorough examination was carried out. All were subjected to Orthopantomograph. Clinical features and complication of tonsilitis was recorded. **Results:** Out of 90 patients, males were 48 and females were 42. The most common clinical features were sore throat in 56, fever in 78, chronic cough in 35, altered taste in 18, lymphadenitis in 23, difficult swallowing in 84 and chronic halitosis in 19 cases. The difference was significant (P< 0.05). Complications were rheumatic fever in 5, acute glomerulonephritis in 3, and peritonsillar abscess in 16 patients. The difference was significant (P< 0.05). **Conclusion:** The most common clinical features were sore throat, fever, chronic cough, altered taste, lymphadenitis, and difficult swallowing. The most commoncomplications of tonsilitis were peritonsillar abscess, rheumatic fever and acute glomerulonephritis.

Key words: Peritonsillar abscess, Sore throat, Rheumatic fever

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This article may be cited as: Tugave J, Sinha D. Evaluation of cases of tonsillitis & their complications. J Adv Med Dent Scie Res 2015;3(1):401-404.

INTRODUCTION

Inflammation of the tonsils, or tonsillitis, is a common clinical illness that can be brought on by a viral or bacterial infection. ENT-related illnesses are the main cause of mortality for children in the pediatric population. Thankfully, there is very little death, but the number of complications is continually rising.[1] A considerable portion of the population is impacted, especially youngsters. The illness may flare up seldom or often. Acute tonsillitis is mostly caused by Beta Streptococcus, sometimes known as strep throat, and to a lesser extent by Staphylococcus aureus and numerous other bacteria. Acute tonsillitis is characterized by visible white streaks of pus on the tonsils and the surface of the tonsils may become bright red. The more typical tonsil symptoms include fever, discomfort, coughing, headaches, red, swollen tonsils, and sore throats.[2]

On clinical examination, a superficial tonsilith may be seen as a white or yellowish hard mass within the tonsillar crypt. The tonsilith may also have a deeper location and present as an enlarged or calcified mass within the tonsil. Superficial tonsiliths often flake off periodically, especially when the patient gargles vigorously.[3] Tonsiliths can be multiple and may vary in size from small to very large. Acute tonsillitis is diagnosed clinically, and it can be challenging to differentiate between bacterial and viral infections. When diagnosing bacterial tonsillitis, rapid antigen testing has a very low sensitivity; nevertheless, more precise tests take longer to produce results.[4] Small cultures of bacteria are grown from tonsillitis patients. Additional causes include CMV, toxoplasmosis, HIV, hepatitis A, rubella, and infectious mononucleosis from Epstein-Barr virus infection. Compared to usual conservative treatment, such as cautious waiting with or without analgesics or antibiotic treatment, it is still uncertain when tonsillectomy should be carried out. However, tonsillectomy has shown to be a significant intervention to enhance the patient's health-related quality of life (HRQoL) in cases of chronic or recurrent tonsillitis.[5] These patients experience symptoms unrelated to tonsils as well. Additionally, they report more medical information.The present study was conducted to assess tonsilitis and their complications.

MATERIALS & METHODS

The present study comprised of 90 patients of tonsilitis of both genders. The written consent was obtained from all selected patients.

Data such as name, age, gender etc. was recorded. A thorough examination was carried out. All were subjected to Orthopantomograph. Clinical features and complication of tonsilitis was recorded. An interpretation of tonsiliths was made when radiopaque masses not deemed to be part of the stylohyoid complex, sialoliths, calcified lymph nodes, phleboliths, or changes in the bone pattern were seen over or near the angle and ramus of the mandible.Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 90		
Gender	**Males**	**Females**
Number	48	42

Table I shows that out of 90 patients, males were 48 and females were 42.

Table II Distribution of symptoms of tonsilitis

Symptoms	Number	P value
Sore throat	56	0.05
Fever	78	
Chronic cough	35	
Altered taste	18	
lymphadenitis	23	
Difficult swallowing	84	
Chronic halitosis	19	

Table II, graph I shows that most common clinical features were sore throat in 56, fever in 78, chronic cough in 35,altered taste in 18, lymphadenitis in 23, difficult swallowing in 84 and chronic halitosis in 19 cases. The difference was significant (P< 0.05).

Graph I Assessment of clinical features

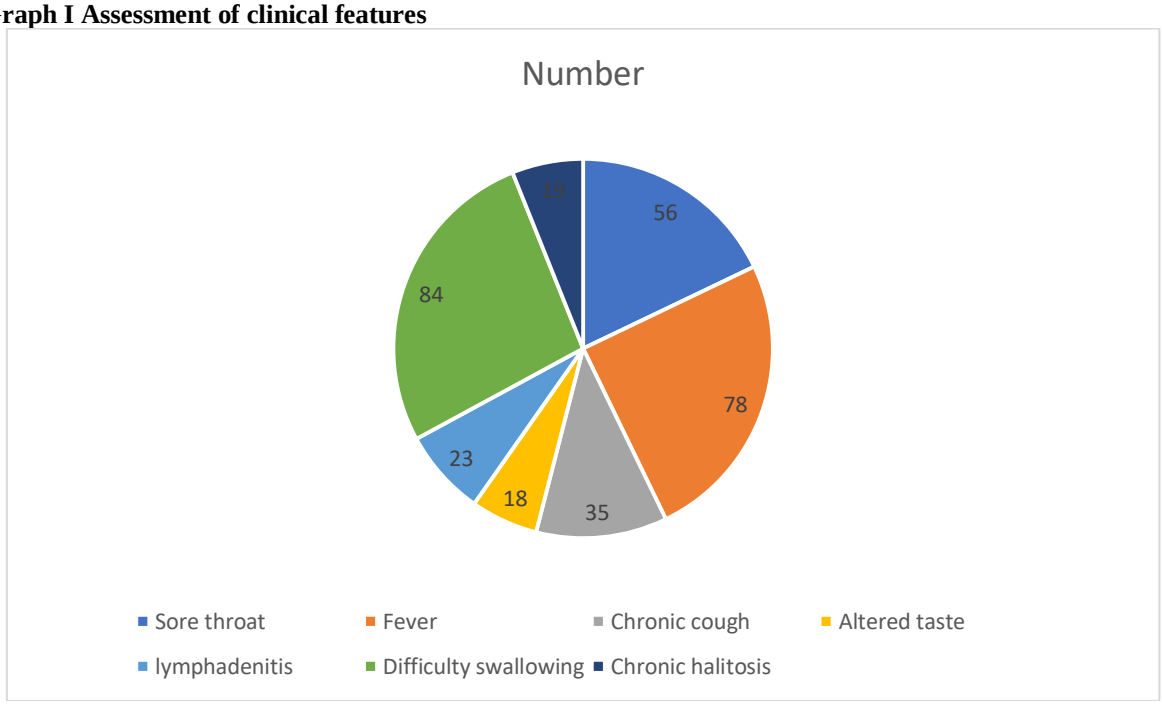

Table III Assessment of complications

Complications	Number	P value
Rheumatic fever	5	0.01
Acute glomerulonephritis	3	
Peritonsillar abscess	16	

Table III shows that complications were rheumatic fever in 5, acute glomerulonephritis in 3, and peritonsillar abscess in 16patients. The difference was significant (P< 0.05).

DISCUSSION

Either tonsillitis alone or in conjunction with a generalized pharyngitis can occur. The literature is ambiguous when it comes to the clinical differentiation between tonsillitis and pharyngitis, and the illness is frequently referred to as "acute sore throat."[6] This definition does not include a sore throat that subsides over the course of 24 to 48 hours while a small upper respiratory tract infection is predominating.[7] The primary focus in diagnosing acute tonsillitis is clinical, and determining if the infection is bacterial or viral is important if antibiotics are being explored.Tonsiliths are composed of phosphate and/or carbonate salts of calcium.[8] These

are arranged in a structure similar to that of bone crystals of hydroxyapatite Ca5[OH|(PO4)3]. The hydroxyl ion (OH−) in the hydroxyapatite can be replaced by fluoride, carbonate, or chloride. The hydroxyapatite crystal has a specific gravity of 3.08 and is 5 on the Mohs hardness scale. A protein matrix has also been demonstrated as part of the composition of tonsilith.[9]The present study was conducted to assess tonsilitis and their complications.

We found that out of 90 patients, males were 48 and females were 42. The most common clinical features were sore throat in 56, fever in 78, chronic cough in 35, altered taste in 18, lymphadenitis in 23, difficult swallowing in 84 and chronic halitosis in 19 cases. Bamgbose et al[10] conducted study consisted of two parts. A prevalence study comprised the first section, while a matched pair case-control study comprised the second. Following the completion of the prevalence study, the matched pair case-control study got underway. This study did not include any novel or uncommon radiographs. Only radiographs created for clinical use were examined in this study. Reviewing 124 patients (53 males and 71 females) ranging in age from 9 years and 2 months to 87 years, a total of 1524 pantomographs were examined.86 subjects had several tonsiliths, while thirty-eight subjects had a single tonsilith. In the research population, tonsilith prevalence was 8.14%. The second portion of the investigation involved 20 subjects in total, 10 for each of the matched pair case-control groups. The results of the observations showed no association between tonsiliths and the occurrence of stones in other organs, ducts, or other tissues.

We found that complications were rheumatic fever in 5, acute glomerulonephritis in 3, and peritonsillar abscess in 16 patients. According to Vijayashree MS et al[11], there are differences in the prevalence of acute tonsillitis depending on the population distribution. Out of all the age categories that were recorded, the preteen age group (6–12 years) had the highest number of tonsillitis cases (61%), followed by the adolescent age group (12–18 years) with 20%, the children (4-5 years) with 10%, and the youngest age group (19–30 years) with 9%. Male patients (55%) had a higher prevalence of tonsillitis than female patients (45%). In terms of socioeconomic status, 61% of cases were found in the low-income group, 35% in the middle-income group, and 4% in the high-income group. The occurrence of symptoms revealed that 73% of the patients had a fever, odynophagia, and sore throats in all of the patients.Additionally, it was noted that just 1% of patients had acute membranous tonsillitis, while 59% of patients showed acute paranchymatous tonsillitis indications and 40% showed acute follicular tonsillitis signs. In 70% of the cases under investigation, the palpably sore digastric lymph node was noted.

Moura et al[12] in their study 3 asymptomatic cases of tonsillolith are reported, incidentally discovered through panoramic radiographs, which showed different sizes of radiopaque images, varying from 2 to 5mm; cases I and III images did not overlap the mandible ramus, which led to a probable diagnosis of soft tissue calcification. Case II had radiopaque unilateral images, with osseous tissue density, overlapping the mandibular ramus, leading to a benign intra-osseous lesion, which was considered as differential diagnosis. No symptoms were reported in any case. Only case I had clinical characteristics, showing highly consistent white plaques partially visible through the mucosa. Computed tomography of the maxillofacial region/head and neck were done. The computed tomography showed hyperdense images in the palatine tonsils, confirming the diagnosis of tonsillolith.

CONCLUSION

Authors found that most common clinical features were sore throat, fever, chronic cough, altered taste, lymphadenitis, and difficult swallowing. Themost commoncomplications of tonsilitis were peritonsillar abscess, rheumatic fever and acute glomerulonephritis.

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