HISTOPATHOLOGICAL FEATURES IN RECURRENT TONSILLITIS WITH AND WITHOUT ACTINOMYCOSIS

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Abstract

Background: Actinomycosis colonizing tonsillar crypts has been described in 6.7-35% of tonsillectomy specimens. It has been suggested that Actinomycosis infection of the tonsils has an etiologic role in tonsillar diseases, while some authors consider this organism to be only a saprophyte of the normal tonsil. Therefore, its role in the diseases of tonsils is not clearly understood. This study was done to find the hospital prevalence of tonsillar Actinomycosis and assess the significance of actinomycosis in recurrent tonsillitis disease.

Material and methods: The histopathology case sheets of operated specimens/biopsy of tonsils of patients diagnosed clinically as recurrent tonsillitis, received in the histopathology department of BPKIHS from January 2010 to December 2014 were included in the study. The specimens after processing, were stained with Haematoxylin-Eosin and evaluated with light microscopy for signs of cryptitis, reactive lymphoid hyperplasia, fibrosis and the presence of Actinomycosis. Actinomycosis was identified as aggregates of filamentous basophilic microorganisms arranged in a radial spoke-like fashion. The data was analysed to determine the hospital prevalence of Actinomycosis and assess its statistical association with other independent variables.

Results: A total of 177 specimens of recurrent tonsillitis were included in the study. The mean age of patients was 21.68 years (SD – 11.18). Actinomycosis present in either one or both tonsils comprised of 51 cases (28%). Chi square test revealed statistically significant association between presence of actinomycosis in tonsils with age of patients and duration of symptoms (p value<0.03 and 0.04 respectively). However, gender, grade of tonsillar enlargement, other clinical features and microscopic features were not associated with Actinomycosis.

Conclusion: Results of this study suggest that Actinomycosis is a saprophyte in the tonsils and plays no role in recurrent tonsillitis.

Keywords: Recurrent tonsillitis, Fibrosis, Cryptitis, Reactive follicular hyperplasia
References


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