

ETIOLOGY , DIAGNOSTICS AND TREATMENT OF ACUTE TONSILLITIS

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Annotation. Acute tonsillitis is a common upper respiratory tract infection that affects people of all ages. Streptococcus group A (*S.pyogenes*, GAS) is one of the most important etiopathogens of acute tonsillitis, as it can cause various clinical forms and complications. The high incidence of streptococcal angina among children and young adults makes it a significant public health concern. The aim of this study was to investigate the etiology of acute tonsillitis in a cohort of hospitalized patients and to evaluate the usefulness of an immunochromatographic test in the diagnosis of *S.pyogenes*-induced tonsillitis.

Key words : acute tonsillitis , streptococcal angina , *S.pyogenes*

Methods. A prospective study was conducted on 223 patients aged 7 to 63 years who were admitted to the angina department of the Republican specialized scientific and practical medical center of epidemiology, microbiology, infectious and parasitic diseases, as well as in the infectious hospital of Andijan region. Clinical examination included collecting a history of the current illness and the use of antibiotics for previous episodes of the disease. Hematological indicators were taken into account. All patients on the day of admission to the hospital underwent a throat swab for microbiological and immunochromatographic (StreptatestR Express diagnostic system, DectraPharm, France) studies to identify GAS. Statistical data processing was performed using the "Microsoft Office Excel 7.0" program.

Results. The bacteriological examination of samples taken from 223 patients showed that *Streptococcus pyogenes* was isolated in 53 (23.7%) patients, *Staphylococcus aureus* in 42 (18.8%) patients, *Staphylococcus aureus+Candida spp* in 27 (12.2%) patients, *Staphylococcus spp* in 15 (6.7%) patients, and *Staphylococcus epidermidis* in 12 (5.4%) patients, and 74 (33.2%) patients had a negative result. In addition to bacteriological examination, an immunochromatographic test - express test (Streptotest) was used, which increased the etiological decoding of acute tonsillitis to 79 (35.4%) positive samples for *S.pyogenes*.

Discussion. The findings of our study suggest that *S.pyogenes* is a significant etiological agent of acute tonsillitis in our patient population, followed by *Staphylococcus aureus* and other bacteria. The use of an immunochromatographic

test for the diagnosis of *S.pyogenes*-induced tonsillitis is a useful adjunct to bacteriological examination, as it can increase the sensitivity of detection and facilitate early identification of the causative agent.

Early identification of *S.pyogenes*-induced tonsillitis is crucial for initiating appropriate treatment and preventing further spread of infection. *S.pyogenes* is naturally highly sensitive to penicillin, and timely etiological diagnosis of streptococcal tonsillitis can help in choosing the most effective antibacterial agent. This, in turn, can prevent the development of both early and late complications associated with untreated or inadequately treated streptococcal angina.

The use of rapid diagnostic tests such as immunochromatographic tests is particularly important in resource-limited settings where access to laboratory facilities may be limited. The rapid results provided by these tests can help in guiding appropriate treatment decisions and reducing the burden of unnecessary antibiotic use.

Conclusion. The results of this study emphasize the importance of early identification of *S. pyogenes*-induced tonsillitis, requiring the widespread use of the rapid test in medical institutions. The prevalence of *S. pyogenes* and its various clinical forms and complications make early identification and treatment essential. The use of the express test for the diagnosis of streptococcal angina will allow for the correct treatment to be prescribed at an early stage of the disease, reducing the risk of further spread of the infection, reducing the risk of early and late complications, as well as preventing the unjustified use of antimicrobial drugs in the treatment of acute tonsillitis.

The information obtained from this study is useful in selecting the appropriate antibacterial drug for treatment, preventing the development of both early and late complications. In contrast, the identification of other bacterial pathogens, such as *Staphylococcus* .

Literature

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