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## Analysis of Tactics of Diagnostics and Treatment of Acute Tonsillitis by Doctors Depending on the Place of Work

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**ABSTRACT:** Streptococcal infection is characterized by a variety of clinical manifestations from asymptomatic carrier of the pathogen to manifest forms. The problem of acute tonsillitis remains relevant in the clinical practice of a doctor. A special role in this is played by group A  $\beta$ -hemolytic streptococcus (Streptococcus pyogenes), found in every third patient with acute bacterial tonsillitis. The article describes the clinical and diagnostic features of the prognosis of the disease. We reviewed the modern diagnostic criteria.

**KEYWORDS**: acute tonsillitis, group A β-hemolytic streptococcus, Streptococcus pyogenes, tonsils.

#### I. RELEVANCE OF THE TOPIC

Sore throat is a common reason for referring to therapists and otorhinolaryngologists, in most cases it is a manifestation of acute tonsillopharyngitis. In most cases, the cause of acute sore throat is an infectious process (viral or bacterial). The most common viruses are adenovirus, enterovirus, rhinovirus, coronavirus, and influenza virus [6]. Diseases caused by group A streptococcus (SGA) are widespread throughout the world, and angina among streptococcosis ranks first in the frequency of registration [3]. At the same time, pharmacoepidemiological studies show that antibiotics are prescribed in 70% of acute sore throat [7]. Clinical forms of streptococcal infections are characterized by both superficial lesions (tonsillitis, tonsillopharyngitis, impetigo, etc.) and severe invasive infections and toxin-mediated diseases (toxic shock syndrome, scarlet fever) [2, 4, 8].

At the initial stages of the disease, it is almost impossible to differentiate a viral or bacterial lesion of the pharynx due to the similarity of clinical manifestations. It is believed that only streptococcal pharyngeal infection caused by GABHS ( $\beta$ -hemolytic group A streptococcus) requires systemic antibiotic therapy, since there is a risk of developing acute rheumatic fever, post-streptococcal glomerulonephritis and purulent complications in the form of paratonsillar abscess [7]. Accordingly, it becomes almost impossible to make a decision on the advisability of systemic antibacterial treatment during the initial examination of the patient. It has also been proven that an increase in the level of markers of bacterial inflammation (leukocytes, C-reactive protein, procalcitonin) is also not a criterion for the bacterial etiology of acute tonsillitis [1, 5]. Therefore, taking into account that the structure of morbidity and polyetiology of the disease, it is advisable to study the diagnosis and treatment of streptococcal tonsillitis.

**Purpose of the study.** Conducting an analysis based on a survey of doctors on the diagnosis and antibiotic therapy of streptococcal tonsillitis.

#### **II. MATERIALS AND RESEARCH METHODS**

Based on the survey, 36 general practitioners (GP) # 2 of the family polyclinic of the city of Andijan and the central multidisciplinary polyclinic of the Pakhtaabad regional medical association and 44 doctors of the infectious diseases hospital of the Andijan region were interviewed. The analysis of the survey of doctors was carried out in accordance with the "Standard for diagnosis and treatment of acute tonsillitis" 2015 of the Ministry of Health of the Republic of Uzbekistan.

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#### **III. RESEARCH RESULTS AND DISCUSSION**

The analysis of the survey of doctors was carried out according to the "Algorithm for the diagnosis and treatment of acute tonsillitis" according to the following scheme:

- Analysis of the tactics of etiological diagnosis of acute tonsillitis at the level of primary care and hospital.

- analysis of the tactics of antibiotic therapy.

Regardless of the length of service, 77% of doctors mistakenly considered the following symptoms of acute tonsillitis to be bacterial in nature;

- increase in body temperature 38-39 °C.

- hyperemia and overlapping of the tonsils.

- rhinitis, conjunctivitis, viral infection (every second doctor).

	Work experience						
Symptoms of tonsillitis	Up to 5 years n = 17	6-10 years old n = 18	11-15 years old n = 11	16-20 years old n = 8	21-30 years old n = 20	21-30 years old n = 20	
Increased body temperature	15 (88,23%)	17 (94,4%)	9 (81,81%)	6 (75%)	18 (90%)	4 (66,66%)	
Decreased appetite	4 (53%)	12 (66,66%)	3 (28,27%)	1 (12,5%)	13 (65%%)	-	
Hypertrophy and hyperemia of the pharynx	3 (17,64%)	16 (88,88%)	8 (72,72%)	7 (87,5%)	20 (100%)	6 (100%)	
Hypertrophy and pharyngeal overlap	17 (100%)	18 (100%)	11 (100%)	8 (100%)	20 (100%)	6 (100%)	
Pain when swallowing	8 (47,05%)	15 (83,33%)	7 (65,63%)	7 (87,5%)	16 (100%)	5 (83,33%)	
Hoarseness of voice	-	4 (22,22 %)	4 (36,36%)	2 (25%)	9 (45%)	1 (16,66%)	
Enlargement of peripheral lymph nodes	12 (70,58%)	10 (55,55%)	4 (36,36%)	3 (37,5%)	8 (40%)	3 (50%)	
Cough	3 (17,64%)	4 (22,22%)	1 (9,01%)	2 (25%)	7 (35%)	2 (33,33%)	
Weakness	6 (35,29%)	5 (27,77%)	3 (2,27%)7	2 (25%)	7 (35%)	4 (66,66%)	

Table 1. Diagnosis of acute tonsillitis depending on the length of service.

7 (19.44%) doctors of polyclinics and 33 (75%) doctors of an infectious diseases hospital consider it obligatory to conduct a bacteriological study in acute tonsillitis, while 29 (80.55%) GPs and 11 (25%) infectious disease specialists consider it unnecessary to conduct this study due to for a long wait for the results of the study. In the second stage, the tactics of using antibiotics, the route of administration and the duration of the course of treatment were analyzed.

Regardless of the place and region of work, doctors preferred the appointment of antibiotics for acute tonsillitis of 22 (27.5%)  $\beta$ -lactam group, 58 (72.5%) of the cephalosporin group, when 38 (47.5%) macrolides.

Table 2. Clinical manifestations of acute tonsillitis, which are the reason for the appointment of an antimicrobial
drug.

	Place of work of doctors					
Symptoms of tonsillitis	No. 2 family polyclinic in Andijan n = 20		CMSPMO n = 16		Infectious diseases hospital of Andijan region n = 44	
	Abs	%	Abs	%	Abs	%
Increased body temperature	17	85%	13	81,25%	39	88,63%
Hypertrophy and hyperemia of the pharynx	18	90%	14	87,5%	41	93,18%
Hypertrophy and overlap of	20	100%	16	100%	44	100%

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the tonsils						
Enlargement of peripheral lymph nodes	12	60%	7	43,75%	28	63,63%
Conjunctivitis	8	33,3	5	31,2%		

Based on the above, more than 93% of patients with acute tonsillitis are prescribed antimicrobial drugs by doctors without specifying the etiological factors, which coincides with the literature data.

For acute tonsillitis, 29% of doctors, regardless of the place of work, prescribed antibacterial drugs orally, 28% of doctors chose parenteral routes of administration of antibiotics, and 43% of doctors preferred prescribing antibiotics in combination orally and injections.

Table 3. Preferred routes of administration of antibacterial drugs, depending on the region of work of doctors.

	Place of work of doctors						
Routes of drug administration	in And	o. 2 family polyclinic in Andijan (n = 20)		CMSPMO n = 16		Infectious diseases hospital of Andijan region n = 44	
	Abs	%	Abs	%	Abs	%	
Orally	14	70%	2	12,5%	2	4,54%	
In injections	3	15%	7	43,75%	11	25%	
Orally and by injection	3	15%	7	43,75%	31	70,45%	
Total	20	100	16	100	44	100%	

Most doctors prescribe antibiotics for acute tonsillitis for 5-7 days, while 93% of doctors prescribed antibiotics for a preventive purpose without isolating Streptococcus pyogenes. Basis for cancellation 22 (55%) doctors - normalization of body temperature, 34 (85%) doctors - disappearance of tonsil deposits.

#### **IV. CONCLUSIONS**

when analyzing the questionnaire in accordance with the principles of the algorithm for diagnosing and treating patients with acute tonsillitis in 2015, regardless of the length of service and place of work of 90% of doctors, erroneous diagnosis and antibacterial therapy of acute tonsillitis were determined.

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