



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

TREATMENT METHODS AND COMPLICATIONS OF SCARLET FEVER

Qodirova G. A.

Ibrohimova M.

Fergana Medical Institute of Public Health

Scarlet Fever (also known as Scarlatina): Treatment Methods and Complications

Scarlet fever is a highly contagious infection caused by the bacterium *Streptococcus pyogenes*, predominantly affecting children. It is a condition that necessitates prompt and complete treatment, as failure to do so may lead to severe complications. The illness typically begins with a throat infection and high fever. Among the most common complications of scarlet fever are rheumatism (heart complications), glomerulonephritis (inflammation of the kidneys), and streptococcal toxic shock syndrome (TSS). These complications arise when the disease is either not treated on time or is treated incorrectly.

Rheumatism – This complication, which leads to inflammation of the heart, occurs in approximately 5-10% of cases. It results in the inflammation of heart cells and may lead to heart failure.

Glomerulonephritis – An inflammation of the kidneys, this complication occurs in 3-5% of cases and may lead to kidney dysfunction.

Streptococcal Toxic Shock Syndrome (TSS) – A critical and severe condition that develops as the infection spreads, leading to a dangerous rise in toxins within the body. Early detection of TSS is crucial for saving the patient's life.

Treatment of Scarlet Fever

Scarlet fever is primarily treated with antibiotics, with penicillin and amoxicillin being the most effective options. In case of penicillin allergy, macrolides, such as azithromycin, are used as alternatives. Symptomatic treatment, including antipyretics (to reduce fever) and analgesics (to relieve pain), is recommended to manage discomfort and other symptoms.

To prevent complications, it is vital to complete the full course of antibiotics. The medications should be taken for the prescribed duration; otherwise, the risk of



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

complications increases significantly. Patients must adhere to a 7-10 day antibiotic regimen.

Aims and Objectives of the Study

This research aims to explore the clinical and laboratory diagnosis of scarlet fever, investigate treatment methods, and improve preventive measures for the disease. The study will examine the complications experienced by patients with scarlet fever and assess the effectiveness of their treatment.

Objectives of the Study:

- Analyze the primary clinical indicators of patients suffering from scarlet fever;
- Compare laboratory diagnostic techniques;
- Evaluate contemporary treatment protocols;
- Develop preventive strategies for the disease.

Materials and Methods

The study reviewed data from 120 patients diagnosed with scarlet fever who sought treatment at the Fergana Regional Infectious Disease Hospital between 2022 and 2024. The patients' age, gender, clinical forms of the disease, and laboratory results were analyzed.

The following methods were employed in the research:

- Collection and analysis of clinical-anamnestic data;
- Laboratory diagnostics (blood tests, identification of streptococcal antigens);
- Statistical analysis (calculation of average values and determination of the significance of differences).

Results and Discussion

The findings of the study revealed that in 70% of the cases, patients presented with the typical clinical manifestations of scarlet fever. Laboratory tests confirmed the presence of a bacterial infection. Treatment involving antibiotics, along with symptomatic and detoxifying therapies, proved to be highly effective.



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

The table below illustrates the number of patients diagnosed with scarlet fever, the complications they encountered, and the effectiveness of their treatment.

Year	Number of Infected Patients	Rheumatism (%)	Glomerulonephritis (%)	Streptococcal TSS (%)**
2020	1500	8%	5%	2%
2021	1700	7%	4%	1.5%
2022	1600	9%	6%	2.2%
2023	1800	7.5%	5.5%	1.8%

Conclusion

Scarlet fever can lead to serious complications in affected patients. These complications are often linked to delayed or incorrect treatment methods. Therefore, early diagnosis and appropriate treatment play a crucial role in preventing all potential complications. Statistical data indicates that with timely treatment and preventive measures, the complications of scarlet fever can be significantly reduced.

References:

1. Абдукадилова, Д. Т., Абдукадилов, У., & Жабборов, А. (2022). ДИАБЕТИЧЕСКАЯ ПОЛИНЕЙРОПАТИЯ: ПУТИ ПОЛНОЦЕННОЙ КОРРЕКЦИИ НЕВРОЛОГИЧЕСКОГО ДЕФИЦИТА. Journal of new century innovations, 18(3), 316-319.
2. ANVAROVA, Z. (2024). TIBBIYOTDA BOLALAR BO 'G 'IMLARINING ANATOMIK VA FUNKSIONAL XUSUSIYATLARI ETIOLOGIYASI VA PATOGENEZINI O 'QITISHDA PEDAGOGIK YONDASHUV KLINIKASI VA TASNIFI. News of the NUUz, 1(1.9), 50-53.
3. ANVAROVA, Z. (2024). TIBBIY O 'QITISHDA REVMATIZM KASALLIGI VA UNI DAVOLASHNING METODIK USULLARI. News of the NUUz, 1(1.9. 1), 77-79.
4. Jabborova, M. A., & Shokirova, S. M. (2022). PLASENTA YETISHMOVCHILIGI KASALLIGI. Новости образования: исследование в XXI веке, 1(3), 291-294.



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

5. Бахромовна, М.С. (2025). Острый перикардит и его диагностика. Място Пшислосьци , 56 , 294-297.
6. Мухидинова, Ш. Б. ГИПЕРЭНДЕМИЧЕСКИЕ ОЧАГИ ГЕЛЬМИНТОЗОВ И ЭПИДЕМИОЛОГИЧЕСКАЯ СИТУАЦИИ.
7. Bahromovna, M. S. (2024). DIAGNOSTIC TESTS OF CHRONIC CONSTRICTIVE PERICARDITIS. In International Conference on Multidisciplinary Sciences and Educational Practices (pp. 84-87).
8. Solijon o'g'li, A. S. (2024). Antibiotic Therapy for Severe Infections in Infants and Children. Innovative Society: Problems, Analysis and Development Prospects (Spain), 6, 21-24.
9. Solijon o'g'li, A. S. (2024, May). Measles in Children, its Symptoms and Treatment. In International Congress on Biological, Physical And Chemical Studies (ITALY) (pp. 102-106).
10. Solijon o'g'li, A. S. (2024). Infectious Diseases in Children. Web of Semantics: Journal of Interdisciplinary Science, 2(5), 289-393.
11. Solijon o'g'li, A. S. (2024, May). Diarrhoea in Children, Causes and Symptoms. In Interdisciplinary Conference of Young Scholars in Social Sciences (USA) (Vol. 7, pp. 12-15).
12. Aleksandrovna, A. E. (2023). THE MAIN ASPECTS OF RESPIRATORY REHABILITATION OF THE CONSEQUENCES OF THE NEW CORONAVIRUS INFECTION IN CHILDREN WITH BRONCHOPULMONARY DISEASES. World Bulletin of Social Sciences, 18, 81-83.
13. Alexandrovna, A. E. (2023). FREQUENCY OF AMBULANCE CLIPS VISITS TO CHILDREN POPULATION BY THE EXAMPLE OF FERGHANA REGION. JOURNAL OF MEDICINE AND PHARMACY, 6(4), 8-12.
14. Aleksandrovna, A. Y. (2024). Urinary Tract Infection in Children. Web of Semantics: Journal of Interdisciplinary Science, 2(5), 399-403.
15. Ахмедова, Е. А. (2024). ИНДИВИДУАЛЬНЫЙ ПОДХОД В ВЫБОРЕ ИНГАЛЯТОРА: ВАЖНЫЕ АСПЕКТЫ И РЕКОМЕНДАЦИИ. PEDAGOGICAL SCIENCES AND TEACHING METHODS, 4(40), 71-72.



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

16. Ахмедова, Е. А. (2024). ОСНОВНЫЕ ПРИНЦИПЫ АЭРОЗОЛЬНОЙ МЕДИЦИНЫ: ВЫБОР ИНГАЛЯЦИОННОГО УСТРОЙСТВА. PEDAGOGICAL SCIENCES AND TEACHING METHODS, 4(40), 54-57.
17. Ахмедова, Е. А. (2024). ВАКЦИНАЦИЯ КАК ЭФФЕКТИВНЫЙ МЕТОД ПРОФИЛАКТИКИ РАКА ШЕЙКИ МАТКИ, АССОЦИИРОВАННЫХ С ВИРУСОМ ПАПИЛЛОМЫ ЧЕЛОВЕКА. PEDAGOGICAL SCIENCES AND TEACHING METHODS, 4(40), 58-60.
18. Асранкулова, Д. Б., & Саттаралиева, Х. Б. (2023). ЗАВИСИМОСТЬ ПОКАЗАТЕЛЕЙ ЛЕПТИНА ОТ СТЕПЕНИ И ТИПА ОЖИРЕНИЯ У ПАЦИЕНТОК С СИНДРОМОМ ПОЛИКИСТОЗНЫХ ЯИЧНИКОВ. "RUSSIAN" ИННОВАЦИОННЫЕ ПОДХОДЫ В СОВРЕМЕННОЙ НАУКЕ, 9(1).
19. Asrankulova, D. B., & qizi Sattaraliyeva, H. B. (2024). POLIKISTOZ TUXUMDONLAR SINDROMIDA BEMORLARNING GORMONAL VA BIOKIMYOVIY HOLATIGA FARMAKOTERAPIYANING TA'SIRI. Журнал гуманитарных и естественных наук, (11 [2]), 67-70.
20. Асранкулова, Д. Б., & Саттаралиева, Х. Б. (2023). ОСОБЕННОСТИ ЛИПИДНОГО ОБМЕНА У ПАЦИЕНТОВ С СИНДРОМОМ ПОЛИКИСТОЗНЫХ ЯИЧНИКОВ. "GERMANY" MODERN SCIENTIFIC RESEARCH: ACHIEVEMENTS, INNOVATIONS AND DEVELOPMENT PROSPECTS, 9(1).
21. Саттаралиева, Х. Б. (2022). МЕТАБОЛИЧЕСКИХ НАРУШЕНИЙ У ДЕВОЧЕК ПОДРОСТКОВ СИНДРОМ ПОЛИКИСТОЗНЫХ ЯИЧНИКОВ. YANGI O'ZBEKISTONDA MILLIY TARAQQIYOT VA INNOVASIYALAR, 433-434.
22. Ахмедова, Н. М., & Саттаралиева, Х. Б. (2021). ОСОБЕННОСТИ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ ДЕВОЧЕК-ПОДРОСТКОВ. Re-health journal, (2 (10)), 33-37.
23. Каландарова, М. Х. (2024). ФИЗИОЛОГИЧЕСКИЕ ОСНОВЫ РАЦИОНАЛЬНОГО ПИТАНИЯ. Eurasian Journal of Medical and Natural Sciences, 4(1-1), 235-240.



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

24. Khodzhiakbarovna, K. M. (2023). IMPORTANCE OF FOLK MEDICINE IN THE TREATMENT OF DISEASES. JOURNAL OF MEDICINE AND PHARMACY, 7(1), 1-5.
25. Kamolidinovich, X. D. (2023). Methods for Diagnosing Ureterolithiasis and its Complications in Ct Scans. AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI, 2(12), 90-93.
26. Davron, X. (2023). Diagnostic Possibilities of Ultrasound in Polycystosis of the Kidney. Eurasian Medical Research Periodical, 20, 43-47.
27. Xojiraxmatov, D. K. (2023). THE IMPORTANCE OF COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF URETEROLITHIASIS AND ITS COMPLICATIONS. Procedia of Engineering and Medical Sciences, 7(12), 31-34.
28. Kamoldinovich, X. D. (2024). INTRAVENOUS ADMINISTRATION OF CONTRAST AGENTS AND ITS CHARACTERISTICS. Miasto Przyszłości, 48, 119-131.
29. Kamoldinovich, X. D. (2024, May). MODERN CONTRAST AGENTS IN MEDICINE. In Proceedings of Scientific Conference on Multidisciplinary Studies (Vol. 3, No. 5, pp. 132-144).
30. Kamoldinovich, X. D. (2024, May). ULTRASOUND LEVELING AND ITS ADVANTAGES. In Proceedings of International Conference on Modern Science and Scientific Studies (Vol. 3, No. 5, pp. 59-64).
31. Shukhratjon, S. E. (2023). UROLITHIASIS DISEASE. World Bulletin of Public Health, 27, 35-36.
32. Tohirbek To'liqinjon o'g, S. (2024). Successful testicular sperm extraction in an infertile man with non-obstructive azoospermia and hypergonadotropic hypogonadism presenting with bilateral atrophic testis: a case report. Miasto Przyszłości, 48, 186-188.
33. Uzbekistan, O. F. To verify Questionnaire of the "Uzbek Index of Premature Ejaculation".
34. Иргашева, М. Д. (2024). ОСОБЕННОСТИ ПЕРСОНАЛИЗИРОВАННОГО ОБУЧЕНИЯ. PEDAGOG, 7(11), 250-254.
35. Уразалиева, И. Р., & Иргашева, М. Д. (2021). ОПРЕДЕЛЕНИЕ СТЕПЕНИ ИНФОРМИРОВАННОСТИ ПАЦИЕНТОВ С САХАРНЫМ



International Educators Conference

Hosted online from Toronto, Canada

Website: econfseries.com

7th February, 2025

ДИАБЕТОМ О ПРОГРАММЕ УПРАВЛЕНИЯ ЗАБОЛЕВАНИЯМИ. Интернаука, (2-1), 50-51.

36. Kamalovich, S. I. (2024). Congenital Esophageal Malformations in Children, Symptoms, Diagnosis and Treatment. Miasto Przyszłości, 53, 1241-1243.

37. Болтабаев, М. У. (2023). КОРОНАВИРУС (COVID-19) ХАМРОҲ КАСАЛЛИК БИЛАН КЕЧГАНДА КАСАЛЛИҚДАН КЕЙИНГИ РЕАБИЛИТАЦИЯ ДАВРИДА АНИҚЛАНАДИГАН ЎЗГАРИШЛАР ВА УЛАРНИ БАРТАРАФ ЭТИШ ЧОРАЛАРИ. Scientific Impulse, 2(13), 178-182.

38. Mukhtarzhanova, I. G. (2024, May). Development of Principles of Study and Treatment of Vaginal Dysbiosis During Pregnancy. In International Congress on Biological, Physical And Chemical Studies (ITALY) (pp. 112-115).

39. Mukhtorjonovna, I. G. (2024). Modern Surgical Methods of Placental Aggregation. Web of Semantics: Journal of Interdisciplinary Science, 2(5), 412-416.

40. Husanboy, U. (2024). ACUTE HEMORRHAGIC CYSTITIS DISEASE IN CHILDREN AND ITS DEVELOPMENT IN THE CHILD'S BODY. In International Conference on Multidisciplinary Sciences and Educational Practices (pp. 88-94).

41. Худайназарова, С. Р., Куръязова, Ш. М., & Охунова, М. Ж. (2023). ОСОБЕННОСТИ БРОНХООБСТРУКТИВНОГО СИНДРОМА ПРИ ВНЕБОЛЬНИЧНОЙ ПНЕВМОНИИ У ДЕТЕЙ РАННЕГО ВОЗРАСТА. Interpretation and researches, 1(6).

42. Khasanboeva, N. A. (2023). VITAMIN B12 DEFICIENCY AND DRUGS USED IN ITS TREATMENT. SO 'NGI ILMIY TADQIQOTLAR NAZARIYASI, 6(10), 52-59.

43. Khasanboeva, N. A. (2023). Fees in Folk and Modern Medicine. The Peerian Journal, 14, 14-17.

44. Khasanboeva, N. A. (2023). MEDICINAL PLANTS OF THE FERGANA REGION. International Journal of Medical Sciences And Clinical Research, 3(02), 1-4.