

Mortality due to tetanus

Yaser Kaplan, Burak Cilli, Ali Bucak, Anıl Yoldaş, Ali Karakus *

Hatay Mustafa Kemal University, Faculty of Medicine, Emergency Medicine, Hatay, Turkey.

*Correspondence Author: Ali Karakus, Hatay Mustafa Kemal University, Faculty of Medicine, Department of Emergency Medicine.

Received Date: November 01, 2024 | Accepted Date: December 02, 2024 | Published Date: January 06, 2025

Citation: Yaser Kaplan, Burak Cilli, Ali Bucak, Anıl Yoldaş, Ali Karakus, (2025), Mortality due to tetanus, *Clinical Trials and Case Studies*, 4(1); DOI:10.31579/2835-835X/095

Copyright: © 2025, Ali Karakus. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract:

Tetanus is a notifiable disease, with an estimated incidence of approximately 1 million patients per year worldwide and a mortality rate of 20% to 30%. Patients who are thought to have tetanus should be hospitalized and monitored according to their general condition and hemodynamic stability.

Keywords: tetanus; opisthotonus; immunoglobulin; mortality

Introduction

Tetanus is defined as a widespread muscle spasm syndrome characterized by acute hypertonia or painful muscle contractions, usually in the jaw and neck muscles, without other medical causes. Although widespread vaccination programs have caused a decrease of >95% in the annual incidence of tetanus, we wanted to emphasize that patients presenting with these complaints should be careful about the possibility of tetanus. A 62-year-old female patient applied to the emergency department due to complaints of severe pain and contraction in the neck and jaw muscles that had been ongoing for 2 days. Her medical history indicated that she had a nail stuck into the sole of her right foot 15 days ago. The patient, who did not go to any health institution, applied to an external center due to swelling in her foot where the nail was stuck. According to the information received from the patient; the patient, who was vaccinated against tetanus at the external center, was discharged with a prescription for antibiotics. The patient's general condition is good, she is conscious, oriented, cooperative. Her blood pressure was 110/70 mmHg. Pulse: 80/min. Respiration: 14/min. Fever: 36 C. Other physical examination findings showed neck contraction and pain, and no additional pathology was detected. The patient who was considered to have temporomandibular dystonia was given analgesia, and after the patient partially relaxed, he was discharged with the outpatient clinic recommendation. When the patient was brought back 3 days later, he had opisthotonus. The patient, who was admitted to the intensive care unit for infectious diseases, was started on tetanus immunoglobulin and

supportive treatment. The patient, who developed respiratory distress during his follow-ups, was started on respiratory support with a mechanical ventilator. The patient, who had cardiopulmonary arrest after 3 days of follow-up in the intensive care unit, was accepted as exitus. In cases brought with complaints of severe pain and contraction in the neck and jaw muscles, speech disorder and jaw locking, tetanus should be considered and the anamnesis should be deepened. Vaccination and tetanus immunoglobulin should be considered according to wound cleaning and the patient's tetanus vaccination prophylaxis status. Immunoglobulin should definitely be administered to cases with dirty wounds and unknown or unknown vaccination schedules. It should not be forgotten that this syndrome, which has a mortality rate of 30%, can quickly lead the patient to respiratory failure.

References

1. Güvenç Doğan, Selçuk Kayır , Arzu Akdağlı Ekici (2016). Elif Aşıcı Tetanus Case with Mortal: A Case Report *Kocaeli Medical J.* 2016; 6;2: 52-55
2. Demirel I, Üstün S (2012). Tetanus Case Needing Mechanical Ventilation. *Firat Medical Journal* 2012; 17(4, supplement 1): 69-71
3. Brauner JS, Vieira SR, Black TP (2002). Changes in severe accidental tetanus mortality in the ICU during two decades in Brazil. *Intensive Care Med* Jul 2002; 28: 930-935.

Ready to submit your research? Choose ClinicSearch and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At ClinicSearch, research is always in progress.

Learn more <https://clinicsearchonline.org/journals/clinical-trials-and-case-studies>



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.