



Brief Clinical Outline of Tetanus Disease

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ABSTRACT

Tetanus is also known as the lockjaw sickness and occurring worldwide with a high mortality, mostly affecting neonates in developing countries. It is bacterial disorder caused by bacterium called *Clostridium tetani*. This bacterium enters in body through cuts or any puncture wounds due to any accidents or clinical mishaps which cause muscle spasms and severe respiration difficulties that followed by suffocation and lead to death in extreme pathological conditions. Its effects are toxin mediated and the timely use of antibiotics, antitoxin, immunoglobulin and wound care might be the mainstays of its management. Hence, timely immunization or vaccination must be required to get rid of this disease even after 10 years.

Keywords: Tetanus; *Clostridium tetani*; Diphtheria



INTRODUCTION

Tetanus disease is caused by *Clostridium tetani*. Endospores of *Clostridium tetani* is inhabitant in soil or dirt and stay dormant for over 40 years [1,2]. This bacterium is secreted tetanospasmin when it enters in the body through any unhealed wound or any accidents/injury [3,4]. This toxin is found to be intoxicated the metabolism of infected persons through interrupted nerve signals from the spinal string to every muscle subsequently with the time (7-12 days) and intensity of infection which further led to chronic muscle fits followed by muscle tearing, cracking or twisting of the spine, muscle spasm, breathing suffocations and finally death in chronic pathological conditions following other symptoms such as fever, sweating, headache, trouble swallowing, high blood pressure, and fast heart rate. The time amongst contamination and first indication of manifestations is around 7 to 21 days [4,5,6].

A noteworthy general wellbeing exertion was reported that Uganda in 2011 was affirmed as having wiped out the tetanus diseases. Different incorporated clinical variables has been reported for wound healing consideration, timely medication, injection administration, tetanus toxoid-containing immunizations and standardized utilization of tetanus invulnerable globulin (TIG) to treat injury or tetanus malady [6,7].

With the use of broad tetanus vaccination, tetanus is now reported the uncommon ailment in the US with other common infections e.g. diphtheria, and pertussis and majority of the general population get their first dosage as kids as the joined immunization called as DTaP (diphtheria-tetanus-acellular pertussis). The Wellbeing authorities is now suggested that grown-ups and the teenagers get boosted with the Tdap (tetanus-diphtheria-acellular pertussis) at time which is further lead to produce their respective antibody to cure them against every one of the three ailments: tetanus, diphtheria, and pertussis [7,8,9,10].

Various medicines e.g. benzodiazepines (e.g., diazepam, midazolam), baclofen or dantrolene are mostly recommended to cure the muscle fits occurred in tetanus infection. And, other anti-infection agents and tetanus resistant invulnerable globulin in tolerant dose were also reported to prescribe by physician to reduce the ill-effect of its bacterial toxins. So, this antidote clinical strategy has been considered a potent immune response to treat the affected nervous system very well [11,12,13]. As well as, in any open injury where the tetanus microbes are found to be flourishing, then that infected injury is reported to remove or evacuate surgically along with medication of Anti-toxins agents e.g. penicillin, metronidazole [14,15].

CONCLUSION

So, this mini review article can be very useful for depicting the reminding approaches to manage the tetanus disease. As per the earlier reported data, tetanus infection remains a serious worldwide public health problem, killing over 500,000 people

each year. So, this noteworthy information can be helpful to aware the general clinical concepts of tetanus disease to manage its ill-effects and its effective treatments.

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