



INTRODUCTION

Tetanus is an acute, potentially fatal disease caused by *Clostridium Tetani* which produces a potent neurotoxin *tetanospasmin*. According to the World Health Organization, Malaysia has reported 64 cases of tetanus in 2019, equally divided between neonatal and non-neonatal age groups¹. This vaccine-preventable disease should no longer be present with the development status of Malaysia. However, it still remains to be a significant public health problem for those under-privileged.

CASE REPORT

An 18-month-old Burmese girl presented to the Emergency Department (ED) with a history of brief, intermittent, rapidly recurring stiffness involving the whole body for 10 days. Each episode lasted about 30 minutes, aborted spontaneously and she remained conscious and responsive throughout. From history, the child was unvaccinated. Upon examination, there was a non-infected healed wound seen at her right sole from weeks prior. Neurological examination showed generalized hypertonia with trismus and opisthotonos. A provisional diagnosis of Tetanus was made (DAKAR score of 3). Blood investigations and lumbar puncture panels were unremarkable. The child was then treated with Intramuscular Human Tetanus Immunoglobulin (HTIG), Metronidazole, regular sedation and muscle relaxant throughout her admission. Child was discharged well after 25 days of admission without any sequelae.

DISCUSSION

Tetanus is uncommon in Malaysia due to high vaccination rates, thus making the diagnosis more challenging¹. It is diagnosed clinically and should be suspected in those coming in with tetanus-prone injuries and inadequate immunization. There are no confirmatory laboratory tests. Management of tetanus aims at halting toxin production (wound debridement, anti-microbial), neutralizing unbound neurotoxins (HTIG, active immunization), controlling the muscle spasms (benzodiazepines, muscles relaxants) and autonomic instability (magnesium sulphate, beta blockade) along with general supportive management (airway management)². Short time to symptom manifestation may predict poor prognosis. DAKAR score is a useful prognosticating tool. The Dakar score consists of six variables: incubation period <7 days, period of onset <48 h, 'high-risk' entry site and presence of fever, spasms and tachycardia on admission. Variables are scored either 0 (absent) or 1 (present), giving a maximum score of six for disease with the worst prognosis³. The recovery from Tetanus is slow and can take up to months. Case fatality rate can be as high as 50% for resource-limited countries⁴.

DAKAR Score		
Prognostic factor	Score 1	Score 0
Incubation period	<7 days	≥7 days or unknown
Period of onset	< 2days	≥2 days
Entry site	Umbilicus, burn, uterine, open fracture, surgical wound, intramuscular injection	All others plus unknown
Spasms	Present	Absent
Fever	>38.4	≤38.4
Tachycardia	Adult >120 beats/min Neonate >150 beats/min	Adult <120 beats/min Neonate <150 beats/min

CONCLUSION

Tetanus is a clinical diagnosis and there is no confirmatory laboratory test. A high index of suspicion is essential to make the correct diagnosis and provide correct initial treatment in ED. Failure to recognize tetanus may lead to mismanagement and detrimental outcomes. DAKAR score can be a useful prognosticating tool in ED where patients were initially encountered.

DECLARATION OF CONFLICT FOR ALL AUTHORS

None.

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