

PP131 TETANUS IN CHILDREN – THE LONG FORGOTTEN

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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 groups. 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 presentation

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 challenging. It's 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). Short time to symptom manifestation may predict poor prognosis. DAKAR score is a useful prognosticating tool. The recovery from Tetanus is slow and can take up to months. Case fatality rate can be as high as 50% for resource-limited countries.

Conclusion

A high index of suspicion is essential to make the correct diagnosis and management. 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