Title: The locked man

Introduction

Tetanus is a rare diagnosis due to Malaysia's large-scale immunisation schedule. We present a rare case of generalised tetanus in an immigrant complicated with rhabdmyolysis and multiorgan failure.

Case description

A 20 year old Myanmar worker with an injured right third toe secondary to alleged hit by metal piece at work presented to us with history of fever, generalised muscle cramping, clenching of teeth and opisthotonus. Two weeks prior, he visited a private clinic and defaulted his daily dressing follow up. His vitals ; GCS 15/15 BP 140/90 PR 100 T 36.5 SPO2 98% under room air with normal hydration status. Clinically, he had limited mouth opening with trismus, occasional opisthotonus and hypertonic abdominal and limbs muscles. He was subsequently intubated in operation theatre in view of difficult airway with otorhinolaryngology team backup. His blood investigation revealed raised total white cell, transaminitis, acute kidney injury with raised creatine kinase. Treatment given were intramuscular ATT 0.5ml, tetanus immunoglobulin 3000u stat and intravenous metronidazole 500mg TDS. He is currently in intensive care with recurrent muscle spasm despite on heavy sedation and multiple muscle relaxant infusion. This has resulted into rhabdomyolysis with CK of 61460 complicated with multiorgan failure.

Discussion

This patient had an antecedent tetanus-prone injury with unknown immunisation and IM ATT status at private practice during initial presentation. His default of daily dressing of right toe predisposed him to unresolved clostridium tetani infection. 80% of tetanus patients present with similar trismus with autonomic instability of tachycardia and fever. Recognising difficult airway is cornerstone in emergency management. Other principles of treatment include halting toxin production with wound management, neutralising unbound toxin with tetanus immunoglobulin and muscle relaxant to control muscle spasms preventing respiratory failure. Autonomic hyperactivity can be managed with magnesium sulfate, beta blockade, dexmedetomidine and others. Multidisciplinary team approach and immediate critical care is vital to ensure good prognosis.

Conclusion

Tetanus is a debilitating and fatal disease if early critical care treatment is missed and require multiple treatment principles required to halt and remove tetanus toxin.

Keywords: tetanus, trismus, difficult airway