PP61 FITTING FRENZY WITH ENDOSULFAN

YB CHENG1, FL MOHAMED1

¹ HOSPITAL SULTANAH BAHIYAH, ALOR SETAR, KEDAH, MALAYSIA

INTRODUCTION

Acute endosulfan poisoning is not uncommon. It is still widely used by farmers as insecticide to increase yield.

CASE

Mr. P, a 28-year-old average-build man presented to the Emergency Department with aggressive behaviour. He was reported to have perceptual disturbances. Minutes after, he started vomiting and had a generalized tonic-clonic seizure. Attempts to abort the seizure with intravenous diazepam 10mg and midazolam 20mg, in total (given 4 minutes apart), were unsuccessful. Consequently, Mr. P was intubated for airway protection. Activated charcoal was given via the nasogastric tube. In view of the possibilities of illicit substance use and acute overdosing of his antipsychotics, intravenous sodium valproate 2800mg (40mg/kg) bolus was administered, in favour of phenytoin. Mr. P's refractory convulsive status epilepticus only aborted after intravenous administrations of propofol (bolus 175mg, 2.5mg/kg; maintenance 5mg/kg/hour), phenobarbitone (bolus 700mg, 10mg/kg); maintenance 5mg/kg/day), rocuronium (maintenance 300mcg/kg/hour), midazolam (maintenance 2mg/kg/hour). The cause of the seizure was finally revealed when the patient's father brought in a bottle of insecticide, labelled "Tengkorak (Skull)" with active content of endosulfan 38%. Mr. P had ingested half a bottle of the insecticide during his psychotic ordeal, 30 minutes prior to his hospital arrival. However, cholestyramine was not given due to its unavailability in our settings. His initial chest x-ray and brain computed tomography revealed chemical pneumonitis with features of hypoxic ischemic encephalopathy, respectively. Subsequent serial blood works demonstrated elevated liver enzymes, deteriorating renal function with worsening metabolic acidosis, leukocytosis, coagulopathy and raised creatinine kinase. Unfortunately, Mr. P succumbed to his death after 3 days in the Intensive Care Unit.

DISCUSSION

Endosulfan is a lipophilic organochlorine, which causes repetitive neuronal discharges, resulting in refractory status epilepticus. Cholestyramine binds endosulfan, hence reduces its enterohepatic and enteroenteric recirculation.

CONCLUSION

Undeniably, history taking in a case of acute poisoning is challenging, but this shall not hinder the immediate measure to terminate the life-threatening sequelae. On top of strict treatment protocols, clinical vigilance with timely management, are vital to improve patient's outcome.

KEYWORDS: endosulfan, seizure