

**Title : “ From Ocean Depths to Clinical Lights: Unveiling the Enigma of Shellfish ( Mussels ) Poisoning”- A Case Series.**

Surekha Kaneson<sup>1</sup>, Khadijah 'Atifah Ahmad Kamil<sup>2</sup> , Nur Farah Syuhada Mohamad<sup>3</sup> , Vithiya Ganesan<sup>4</sup> ; Emergency & Trauma Department ,Hospital Port Dickson.

**Abstract:** We present a series of cases illustrating the diverse clinical presentations in patients with mussel poisoning. This report highlights the diagnostic and therapeutic dilemmas encountered in managing neurotoxic and paralytic seashell poisoning; also emphasizes the importance of vigilance and multidisciplinary collaboration in optimizing patient outcomes.

**Introduction:** Mussel poisoning, caused by the ingestion of shellfish contaminated with saxitoxins produced by harmful algal blooms, can result in a spectrum of clinical manifestations, ranging from numbness with mild gastrointestinal symptoms to life-threatening respiratory paralysis. Despite its prevalence, the clinical manifestations and management strategies of mussel poisoning remain poorly understood. Here, we describe a series of cases to elucidate the varied presentations and therapeutic interventions associated with this condition.

**Case Description:** Total of 11 patients presented to Hospital Port Dickson.

CASE 1 : 28 years old (yo) gentleman presented with multiple episodes of seizure for the 1st time, intubated on arrival for status epileptics . CT brain was normal. Admission diagnosis Seizure for investigation.

CASE 2 : 62 yo Gentlemen presented with sudden onset of bilateral upper limb and lower limb numbness while having prayers. CT brain was normal. Admission diagnosis generalized numbness for investigation.

CASE 3 : 64 yo Gentleman , presented with sudden onset of bilateral upper limb and peri-oral numbness associated with hypertension BP 248/131. Admitted for Sensory Lacunar Infarct.

CASE 4 : Daughter to case 3 , 22 yo female , presented the next day with peri-oral numbness and bilateral hand numbness following 2 hours post Mussel ingestion .

- Identified as Mussel Poisoning outbreak, established Mussel consumption for all the previous case prior to the onset of symptoms. Diagnosis revised to Neurotoxic Shellfish Poisoning. All the relevant authorities been notified and strategies for public alert and prevention taken accordingly.
- In summary clinical presentation in all 11 cases varies including peri-oral and extremities numbness in all patient with 2 hours of mussel ingestion, 4 of them had mild gastrointestinal symptoms and 3 of them had CNS manifestation along with respiratory depression requiring intubation. No mortalities and all discharged well.
- Toxicology report confirms bio-toxin saxitoxin identified; Paralytic Shellfish Poisoning (PSP)

**Discussion & Conclusion:** Our case series underscores the diverse clinical manifestations of mussel poisoning, ranging from gastrointestinal and neurological symptoms to respiratory compromise and cardiovascular instability. Timely diagnosis and appropriate management are essential to mitigate morbidity and mortality associated with this condition. Strategies for prevention, including public

health advisories and regulatory measures, are warranted to reduce the incidence of mussel poisoning outbreaks.

**Keywords** : Mussel , Saxitoxin