**A CASE OF NEUROTOXIC SHELLFISH POISONING**

**FROM INGESTION OF MANGROVE CLAM**

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| **INTRODUCTION**  Neurotoxic shellfish poisoning is caused by consumption of bivalves feeding on dinoflagellates that produce brevitoxin during harmful algal bloom.  There have been no reported cases of fatality from NSP. In Malaysia, most reported cases of shellfish poisoning are paralytic shellfish poisoning (PSP) with a few fatalities.  **CASE PRESENTATION**  A 34-year-old gentleman, with no-known medical illness or allergies developed numbness over perioral, tongue and bilateral fingertips approximately 30 minutes after ingesting 5 mangrove clams. Ignoring the symptoms, the patient continued eating up to a total of 20-30 mangrove clams. Four hours later, he developed generalized numbness of his body and unsteady gait. The patient’s wife developed mild symptoms of perioral paresthesia which resolved after a few hours. On arrival to the emergency department, the patient was noted to have ataxic gait. His vital signs were stable. Both the patient and wife were treated as possible neurotoxic shellfish poisoning (NSP) in the hospital. Since there is no specific antidote available for NSP, immediate supportive care was given to the patient and he was admitted to ICU for close monitoring. Samples of uncooked shellfish was collected from the patient’s home and sent to Selangor Fisheries Biosecurity Centre for further biotoxin analysis. On day three of admission the patient’s symptoms completely resolved and he was discharged with no complications.  **DISCUSSION**  Brevitoxin is produced by dinoflagellates such as *Karenia Brevis*. The native physiological function of brevitoxin to the dinoflagellate is unknown but osmotic stress is known to increase production of brevitoxin. Bivalves are filter feeders and when feeding on the dinoflagellates, store the toxin in their flesh. Clinical manifestations of NSP include a cluster of neurological and gastrointestinal manifestation such as nausea and vomiting, paresthesia of lips, mouth and tongue, distal paresthesia, ataxia, slurred speech and dizziness. Partial paralysis and respiratory distress has been reported.  **CONCLUSION**  NSP and PSP can occur during harmful algal bloom. Inter agency networking and periodic surveillance is vital to prevent any outbreak. Public awareness is of paramount importance to minimize human and public health risk. |

KEYWORD :

Neurotoxin shellfish poisoning

Mangrove clam

Brevetoxin