PP063 PUFFER FISH ATTACK!

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INTRODUCTION:

Puffer fish (Tetraodontidae), also known as globe fish or blow fish and some may call it balloonfish. There are more than 120 species of pufferfish worldwide and is commonly found in the shallow waters around Malaysia. To humans, tetrodotoxin from puffer fish is deadly, up to 1,200 times more poisonous than cyanide. There is enough toxin in one pufferfish to kill 30 adult humans, and there is no known antidote.

CASE REPORT:

A 3 year old boy presented at emergency department with sudden onset bilateral lower limb weakness and vomited once. Upon arrival, child looks lethargic with laboured breathing and central cyanosis. There were no skin rashes, no audible wheeze or stridor, no periorbital and lips swelling. However, parents claimed child was well the whole day. Upon further questioning, parents said that they ate puffer fish for dinner. Mother experienced numbness over tongue and the child only took a small bite of it 2 hours prior to onset. Child was intubated in view of impending respiratory collapsed with type 2 respiratory failure. He was managed in ICU and was discharged well on day 3 of admission.

DISCUSSION:

The mortality from puffer fish poisoning remains disturbingly high at around 60%, and death usually occurs within the first 24 hours after ingestion of the toxin. The poison or tetrodotoxin of the puffer fish is a neurotoxin present in the liver, ovaries, intestines, and skin of puffer fish. Tetrodotoxin is a heat stable neurotoxin that block sodium conductance and neuronal transmission in skeletal muscle, leading to weakness or paralysis and potentially death if ingested in sufficient quantities. The clinical features include body numbness, nausea, vomiting, abdominal pain, hypotension, generalized weakness. arrhythmias, and muscle paralysis. There is no specific treatment for tetrodotoxin poisoning and the management of puffer-fish poisoning is largely supportive.

CONCLUSION:

In an emergency situation, besides a thorough clinical evaluation and prompt treatment, the physician must have a high index of suspicion for the likelihood of acute poisoning or toxin exposure in a patient who comes acutely ill with life threatening manifestations especially in pediatric group. A prompt diagnosis and immediate lifesaving intervention plays a major role to determine and improve a patient's clinical outcome.