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TETRODOTOXIN POISONING IN MARINE BIOTA

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Abstract

Tetrodotoxin (TTX) is a kind of low-molecular weight non-protein neurotoxin. Tetrodotoxin (TTX) is a deadly neurotoxin which selectively inhibits Na+ activation mechanism of nerve impulse, without affecting the permeability of K+ ions. Because of this sodium channel blocking action, it is majorly being studied for biomedical applications. It is one of the most potent neurotoxins found in nature, and is found in pufferfishes and various marine biota, including mollusks, newts, octopuses, flatworms, and gastropods. It has been regarded as a typical sodium channel inhibitor for small molecular and paralysis toxin, and one of the most toxic substances of non-protein in nature. The term "toxic animal" refers to a type of organism, their metabolites, or the organism itself that can affect the normal physiological activities of humans or other organisms. The purpose of this study is to describe this case series in order to determine risk factors to prevent further outbreaks.

Keywords: Pufferfishes, tetrodotoxin, toxicity, risk factors