



To: Physicians, Nurses, and Other Health Care Providers in the Federated States of Micronesia
From: Ron Kirschner, MD
Medical Director, Nebraska Regional Poison Center
Subject: Ciguatera fish poisoning
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- Ciguatera fish poisoning (CFP) is due to consumption of fish containing ciguatoxins that open sodium channels in nerve cells.
- Ciguatoxins are produced by microorganisms that are consumed by fish and concentrated in those higher on the food chain. The fish typically appear normal.
 - The risk of CFP is greatest with consumption of larger predatory reef fish.
- The classic findings of CFP include GI, neurologic, and cardiovascular effects.
- GI symptoms (vomiting, diarrhea, abdominal pain) typically resolve within 1-4 days but neuro effects may persist for weeks to months.
 - The most common neuro effects are paresthesias/dysesthesias of the face and extremities (often with a sensation of hot and cold reversal).
 - Bradycardia and hypotension are occasionally seen.
- The diagnosis of CFP is based clinical findings and a history of consuming reef fish. There are no blood or body fluid tests available to confirm the diagnosis.
- Treatment is primarily supportive; volume repletion and correction of any hemodynamic instability are the first priorities.
 - Mannitol (0.5-1.0 g/kg IV over 30-45 minutes) may alleviate neuro symptoms, and is most likely to be effective within 48-72 hours of fish consumption.
 - Amitriptyline and gabapentin, in doses prescribed for neuropathic pain, have been used to treat dysesthesias, but there are no controlled studies.
 - Alcohol or certain foods may exacerbate neuro symptoms in some patients, and they should avoid such foods for 3-6 months.
- The incidence of CFP can be reduced by avoidance of larger reef fish (> 3 kg).

References

Chan TYK. Severe bradycardia and prolonged hypotension in ciguatera. *Singapore Med J* 2013; 54: e120.
Friedman, MA. Ciguatera fish poisoning: treatment, prevention and management. *Marine Drugs* 2008; 6: 456.

Our trained staff of nurse specialists in poison information and physician toxicologists is available 24 hours a day to answer your questions. In the Federated States of Micronesia, health care professionals and the public can reach the Poison Center by calling 288, wait for an automated operator, then 888-222-4516.