Ciguetera Poisoning

Eating tropical reef fish that have fed on toxic algae triggers Ciguetera poisoning. These toxins reach particularly high concentrations in large predatory tropical reef fish. Barracuda are commonly associated with ciguatoxin poisoning. Eating fish caught between latitude 35° N and 35° S can cause ciguetera poisoning. Other potential dangerous fish include:

- Grouper.
- Red snapper.
- A number of other fish living in oceans.
- Sea bass.
- Eels.
- Mullet.
- Kingfish.

These fish are typically caught by sport fishermen on reefs in Hawaii, Guam and other South Pacific islands, the Virgin Islands, and Puerto Rico. **Because the toxin is heat-stable, it is unaffected by cooking.**

SYMPTOMS

Ciguatoxin usually causes symptoms within a few minutes to 30 hours after eating infected or tainted (*contaminated*) fish. Occasionally it may take up to 6 hours. Common nonspecific symptoms include feeling:

- Sick to your stomach (*nausea*).
- Diarrhea.
- Cramps.
- Excessive sweating.
- Headache.
- Muscle aches.
- Vomiting.

Other symptoms that may occur include:

- The feeling (*sensation*) of burning or "pins-and-needles."
- Weakness.
- Itching.
- Dizziness

Patients may experience:

- Reversal of temperature sensation in their mouth (hot surfaces feeling cold and cold surfaces hot).
- Unusual taste sensations.
- Nightmares.
- Hallucinations.
- Tingling of the lips, tongue and throat.

Other symptoms that have been described include:

- Numbness.
- Collapse.
- Coma.
- Confusion.

Ciguatera poisoning is rarely fatal. Symptoms usually clear in 1 to 4 weeks. Most people recovering within a few days or weeks with supportive treatment. Ongoing disability has occasionally occurred.

DIAGNOSIS

Diagnosis is generally based on symptoms and a history of recently eating seafood. Laboratory testing for the specific toxin is generally not necessary. Leftover fish or shellfish can be tested for the presence of the toxin more easily. Identification of the specific toxin is not usually necessary for treating patients because there is no specific treatment.

GENERAL GUIDELINES FOR SAFE SEAFOOD CONSUMPTION:

- Persons with weakened immune systems or liver problems should not eat raw seafood. They are at higher risk of **Vibrio** infection.
- Keep seafood on ice or refrigerated at less than 38° F (3.3° C) to prevent spoilage.
- Keep fresh tuna, mackerel, grouper, and mahi mahi refrigerated to prevent development of histamine. Cooking spoiled or toxic seafood will not keep you safe. These toxins are not destroyed by cooking.
- Do not eat barracuda.
- Check with local health officials before collecting shellfish. Look for Health Department advisories about algal blooms, dinoflagellate growth or "red tide" conditions that may be posted at fishing supply stores.
- Do not eat finfish or shellfish sold as bait. Bait products do not meet the same food safety regulations as seafood for human consumption.

SEEK IMMEDIATE MEDICAL ATTENTION IF:

- If you have eaten seafood and develop problems or symptoms that seem unusual for you.
- If the problems are severe, call for local emergency medical help.

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