

Ciguatera Fish Poisoning

Fish Found in the Caribbean Region and other parts of the World which have found to contain the ciguatoxin

Barracuda



Snapper



Grouper



Mackerel



Definition

Ciguatera is a food-related illness that occurs in humans due to eating marine organisms/ fishes that are contaminated with a toxin called ciguatoxin. This toxin has been found to be present in tropical fishes such as mackerel, grouper, snapper and the barracuda. Pictures of these fishes are given above.

Toxic Effects

Once ingested this toxin affects the gastrointestinal, nervous and cardiovascular systems. Symptoms such as vomiting, diarrhea, weakness, headache, abdominal pain, cramping, rapid heartbeat, coughing, hypotension, and facial numbness and in some cases the person may even die.

Treatment

There are no known antidote or antitoxins for this type of food poison. However, anti-emetics, antidiarrhoeals and IV rehydration has been found to be helpful. Persons with this type of poisons should immediately contact their doctor.

Shellfish Poisons

Examples of Shellfishes Eaten in the Caribbean Region and other Parts of the World that has been found to cause Shellfish Poisoning

Oysters



Mussels



Scallops



Scallops



Clams



Shellfish poisoning is caused from ingestion of raw or cooked mollusks containing the toxins. There are four syndromes of shellfish poisonings namely: Paralytic, Neurologic, Diarrheal and Amnesic Shellfish Poison. These four syndromes are associated with bivalve mollusks such as oyster's scallops, mussels and clams, as are shown in the pictures above. Each of these syndromes is caused by a specific toxin that is found in these types of shellfish. These toxins are as follows:

- Paralytic Shellfish Poisoning is caused by Saxitoxin
- Neurologic Shellfish Poisoning is caused by Brevetoxin
- Diarrheal Shellfish Poisoning is caused by Okadaic acid
- Amnesic Shellfish Poisoning is caused by Domoic acid

Each of these toxins has a specific mechanism of action which results in the different toxic effects seen in the syndromes.

Toxic Effect

Paralytic shellfish poisoning usually manifests itself within thirty (30) minutes of ingestion. The symptoms that are most often seen from this type of poisoning include: numbness of the lips, tongue and gums, headache, muscle weakness. Symptoms of the gut are less common but may include nausea, vomiting, diarrhea and abdominal pain.

Neurologic shellfish poisoning symptoms occur within fifteen (15) minutes to eighteen (18) hours after ingestion. The symptoms are usually milder than with Paralytic shellfish poisoning. These symptoms include: numbness of the face, trunk and limbs, dizziness and hot/cold sensation. Rectal burning and gastroenteritis may also occur.

Diarrheal shellfish poisoning gastroenteritis with diarrhea and abdominal pain occurs shortly after ingestion and usually lasts for about one to two days.

Amnesic shellfish poisoning has not been found to be common in the Caribbean, however gastroenteritis occurs with headache and temporary loss of memory. In severe cases seizures and coma may occur.

Treatment

There is no specific cure for shellfish poisoning, however if poisoning occurs within the last three (3) hours vomiting should be induced. It is important that patients are given plenty of clear fluids or IV fluids due to loss through vomiting and diarrhea. Antibiotics have not proven to be helpful and antidiarrheals and antiemetics may worsen the condition, as they would lengthen the time the toxin stays in the body.