

Preface :

Ciguatera is food poisoning which is caused by the tropical fish. It is a common disease reported from Pacific, Caribbean, and Indian Ocean regions. The patient who ate ciguatera fish has neurological symptom called dry ice sensation. And also has nausea, vomiting and diarrhea. In severe case, the patient has hypotension and bradycardia. Rarely, the patient will die. There is non specific treatment. Some doctor use intra venous mannitol infusion but evidence is low quality. I will report 3 ciguatera patients with bradycardia.

Patients :

Case 1 : 56 years old female

Case 2 : 62 years old male (husband of Case 1)

Case 3 : 82 years old female (mother of Case 2)

A 56 year-old female came to emergency room with chief complaint of vomiting.

Her past history is hypertension. At lunch she ate the fish which her husband caught previous day.

Several hours later, she felt nausea and suddenly vomited. When she came to ER, she had bradycardia and decreased blood pressure. Her husband was waiting at outside of ER, but suddenly he started vomiting. He also had bradycardia and decreased blood pressure.

His mother ate the fish just a little, she vomited at night.

Clinical course :

Table 1 shows vital signs and clinical features of these 3 patients. All patients had bradycardia(HR 40's) and hypotension (systolic blood pressure < 100mmHg) but no fever and hypoxia. All patients had gastrointestinal symptoms(nausea, vomiting, and diarrhea). Except Case 3, two patients had numbness of tongue and dry ice sensation.

Table 1 : vital signs and clinical features

Case	1	2	3
Blood pressure (mmHg)	88/56	40/not measured	70/38
Heart rate (bpm)	45-51(sinus)	40-50(sinus)	45(sinus)
Body temperature (°C)	36.1	36.4	35.6
SpO2(%) Room air	100	98	95
Nausea/Vomiting	+	+	+
Diarrhea	+	+	+
Neurological symptom/others	Numbness of tongue Systemic edema	Numbness of tongue Perspiration Headache	Chillness Headache

The Case 1 and the Case 2 patients had drip infusion and atropine intravenously. Case 3 patient had drip infusion without atropine. They didn't have mannitol at all. Their blood pressure recovered for several hours after starting treatment. All patients recovered within 15 days(Figure 1).

Conclusion :

These three patients ate the fish which the Case 2 patient caught near his house(Figure2).

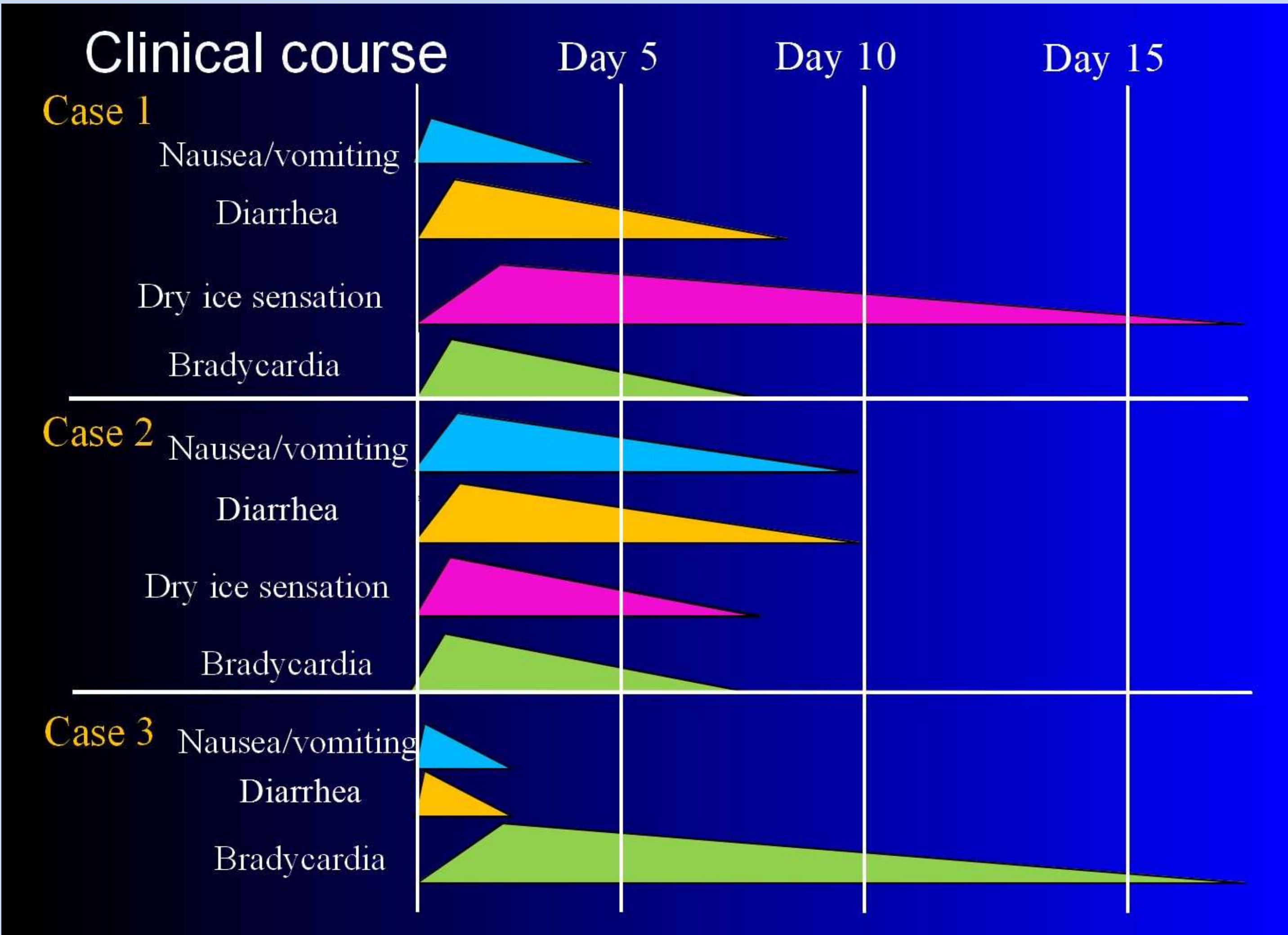


Figure 1 : Clinical course

Poisoning fish occur as a result of biological concentration. If human eats contaminated fish, he may have gastrointestinal and neurological symptoms. In severe case, he may have hypotension and bradycardia. We must pay attention to much more about food poisoning with fish especially in tropical area.



Figure 2 : Spangled emperor