

Neurological troubles after consumption of Mediterranean Sea figs of the *Microcosmus* genus

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Introduction

Mediterranean sea figs or sea violets of the *Microcosmus* genus are eaten in Southeastern France where these ascidians are a part of local seafood platters (marine animals also eaten in Italy, Croatia and Chile). People eat it's bright yellow flesh raw, like oysters. Since January 2011, some patients reported to the Poison Control Center in Marseille, occurrence of neurological trouble after eating *Microcosmus sp.*



Microcosmus sabatieri

Observations

	Case n°1	Case n°2	Case n°3	Case n°4	Case n°5
Date	January 2011	December 2011	January 2012	March 2012	December 2012
Number of patients	2 men	2 women	1 woman	2 men	1 man
Age (year)	52 and 30	70 and 78	55	33 and 40	60
Symptoms	Diarrhea, diplopia, accommodation troubles, ataxia, dizziness.	Diarrhea, vomiting, sweating, dizziness, ataxia.	Diarrhea, vomiting, diplopia, muscular weakness.	Dizziness, walking troubles, headache.	Dizziness, Legs and stomach muscle pain, tinnitus
Delay	60 min	30-60 min	30 min	30 min	90 min
Evolution	Complete recovery within 24 hours				



Sea violets cut in two on a seafood platter. The yellow part is the edible one.

Discussion

Recent studies proved that tunicates are able to accumulate phycotoxins (1,2). In Croatia a human collective paralytic shellfish poisoning has been described in 2012 after a meal containing sea violets (3). But the clinical picture reported by the 7 patients was different from other seafood poisonings with moderate digestive troubles and a cerebellar syndrome appearing 30 minutes to one hour after the *Microcosmus* ingestion. The responsible molecules or toxins are still unidentified but samples were taken during the first episode in order to analyze the implicated sea figs as soon as possible.

Conclusion

Microcosmus sp consumption is limited to the Mediterranean Sea. So, there are little occasions to be confronted with this kind of poisoning. Since this phenomenon is rare and new, toxicologist must be on alert if new cases occur.

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