PSI2009/466
Ciguatera, From Bloom to Itch Last lessons from French Polynesia

Marie-Ludivine Chateau-Degat\textsuperscript{a}, Mireille Chinain\textsuperscript{b}, Taiana Darius\textsuperscript{b}, Anne-Marie Legrand\textsuperscript{c}, Marie-Odile Huin-Blondey\textsuperscript{d}, Ngoc Lam Nguyen\textsuperscript{e}, René Chansinit\textsuperscript{f} and Eric Dewailly\textsuperscript{a}

\textsuperscript{a}Unité de Recherche en Santé Publique, CR-CHUL, 2875 Boul Laurier, Delta 2, suite 600, G1V 2M2 Québec, Canada
\textsuperscript{b}Institut Louis Malardé, Laboratoire des Microalgues Toxiques, BP30, 98713 Papeete, Tahiti, 98713 Papeete, French Polynesia
\textsuperscript{c}Institut Louis Malardé, Laboratoire de Parasitologie médicale, BP30, 98713 Papeete, Tahiti, 98713 Papeete, French Polynesia
\textsuperscript{d}Public Health Directorate of French Polynesia., Tahiti French Polynesia, 98713 Papeete, French Polynesia
\textsuperscript{e}Institut Louis Malardé, Service de Consultations et d’Investigations Epidémiologiques - BP 30 Papeete, 98713 Papeete - Tahiti, French Polynesia
marie-ludivine.chateau-degat@crehul.ulaval.ca

Background: Ciguatera poisoning is an ichtyotoxicosis which spare no tropical areas, French Polynesia ahead. Even though this intoxication has been known since the 18th century, many epidemiological aspects remain unclear from its spreading in humans after an algae bloom to time span of the disease. This study will overview briefly some spatio-temporal aspects of this seafood poisoning in French Polynesia then mainly focusing on chronic aspects of the disease.

Method & Results: Two studies helped to achieve our goal. First, a retrospective study investigated the temporal link between the growth of Gambierdiscus spp. and declared cases of ciguatera disease in Tahiti Island. Second, a prospective study was used to determine the prevalence of chronic symptoms and describe their rate of disappearance at 15 days, 2 and 6 months after the onset of ciguatera in French Polynesians adults. Results from our model of changes in the incidence of ciguatera disease following algae blooms might be useful for assisting ciguatera risk management initiatives. Indeed, results from the study highlight a clear temporal relation between ciguatera disease and its etiologic agent: Gambierdiscus spp. From a clinical point of view, our results suggest that several symptoms observed in 183 patients at the acute phase of the disease are still persistent 6 months after the onset. Conclusion: results obtained from this French Polynesian studies provide some new highlight 1-ciguatera outbreak may be predicted by modeling and 2)-ciguatera disease which is similar to a sensory polyneuropathy in French Polynesia may evolve to chronic stage.

Number of words in abstract: 249
Keywords: ciguatera - epidemiology - chronic - bloom
Technical area: Health Challenges in the Pacific: Infectious Disease, Non-Communicable Disease and the Health Workforce
Special session: Not specified
Presentation: Oral presentation preferred
Special equipment: No special equipment