Case Report: An Outbreak of Amyloodiniosis in Puffer (Takifugu rubripes) in Taiwan

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ABSTRACT An outbreak of Amyloodinium ocellatum infection was diagnosed in cultured marine puffers in the northern Taiwan in August 1997. The affected puffers initially were loss of appetite, sluggish swimming, and gasping with open mouth over the water surface and progressive to death. The mortality was approximate 10% (600 / 6000). At necropsy, there were an excess of mucus on the gills and multiple white spots on the surface of secondary lamellae. Histopathological examination of the gills revealed mild mononuclear cell inflammation with numerous protozoan parasite Amyloodinium ocellatum. Scanning electron microscopic observation revealed oval to round parasite, 50-60um in diameter, resembling Amyloodinium ocellatum attaching to the gills. Parasitic examination by wet mounts revealed many Amyloodinium ocellatum organisms. The diagnosis of amyloodiniosis was confirmed on the basis of light microscopic findings, parasitic examination and scanning electron microscopic observation. CuSO4 was recommended to treat the diseased fish and the signs were subsided after two weeks of medication.


Key words: Takifugu rubripes, Amyloodiniosis, Gill