TETRODOTOXIN POISONING FOLLOWING INGESTION OF
THE TOXIC EGGS OF THE HORSESHOE CRAB
CARCINOSCORPIUS ROTUNDICAUDA, A CASE SERIES
FROM 1994 THROUGH 2006

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Abstract. Between 1994 and 2006, a total of 280 cases of varying degrees of tetrodotoxin poisoning following ingestion of the toxic eggs of the horseshoe crab, Carcinoscorpius rotundicauda, were admitted to the medical service of Chon Buri Hospital. The severity of the poisoning was classified into four stages based on clinical signs and symptoms of human tetrodotoxication. Of 245 available medical records; 100 were in stage 1, 74 were in stage 2, 3 were in stage 3 and 68 were in stage 4. The frequencies of symptoms and signs included the following: circumoral and lingual numbness (98%), hands and feet numbness (94.7%), weakness (59.6%), dizziness and vertigo (54.3%), nausea and vomiting (52.6%), transient hypertension (39.6%), respiratory paralysis (27.7%), fixed dilated pupils (14.7%), ophthalmoplegia (12.2%), blood pressure lower than 90/60 mmHg (5.7%), and polyuria (0.4%). All patients received symptomatic and supportive treatment. Endotracheal intubation and mechanical ventilation were considered when paralysis was progressing rapidly. The results of treatment are as follows: 239 patients (97.5%) showed complete recovery, 5 patients (2%) died, and 1 patient (0.4%) suffered anoxic brain damage. Horseshoe crab poisoning occurs both sporadically and epidemically in Chon Buri. Seasonal variation in the number of cases of poisoning was observed with a peak from December through March.