



## HAFF DISEASE AFTER EATING FRESHWATER FISH – NEOLISSOCHEILUS SOROIDES

**C Chartkul**<sup>1,2,3</sup>, TJiranantakan<sup>1,2</sup>, K Promrat<sup>4</sup>, S Chomchai<sup>1,2</sup>

<sup>1</sup> Department of Preventive and Social Medicine, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, Thailand

<sup>2</sup> Siriraj Poison Control Center, Siriraj Hospital, Bangkok, Thailand

<sup>3</sup> Emergency department, Prapokklao Hospital, Chanthaburi, Thailand

<sup>4</sup> Emergency department, Maharaj-nakornsrihammaraj Hospital, Nakornsrihammaraj, Thailand

Haff disease is unexplained rhabdomyolysis in patients who ate fish within 24 hours before the onset of illness. This condition has not been reported in Thailand. From literature review, it is associated with eating buffalo fish (*Ictiobus cyprinellus*), burbot, eel, pike, crayfish salmon, silver dollars (*Mylossoma* spp.), black-finned colossoma (*Colossoma macropomum*), freshwater pompano (*Piaractus brachypomus*), and marine box fish. We report Haff disease associated with eating freshwater fish – *Neolissocheilus soroides*

A 42-year-old male patient and three friends caught fish namely *Neolissocheilus soroides*, discarded intestinal organs, cooked and ate them. The ingested amount was unknown but the patient eat fish the most. Three friends experienced minimal myalgia but the symptom resolved spontaneously within a few days. Our patient suffered from myalgia, weakness and had dark brown urine approximately 5 hours after the meal. His medication included simvastatin 40 mg per day. He denied increased dose or change of lipid lowering agents, fever, recreational drug use, recent illness, significant physical exertion and trauma. He sought medical attention due to dyspnea on the second day. He had good consciousness but looked fatigued. Vital signs included blood pressure 127/70 mmHg, pulse rate 100 beats/min, respiratory rate 36/min and body temperature of 36.7 degree Celsius. Physical examination revealed tenderness over thighs and shoulders, and proximal muscle weakness of both upper and lower extremities. Electrocardiogram exhibited sinus tachycardia and tall peak T. His laboratory results showed hyperkalemia; K 6.4 mEq/L (normal 3.5-5.0 mEq/L), elevation of serum creatinine; 3.54 mg/dL (normal 0.6-1.2 mg/dL) and creatinine phosphokinase (CPK) 25,450 U/L (normal 24-195 U/L) consistent with rhabdomyolysis and acute kidney injury. His three friends also had myalgia and came in for evaluation but did not require hospitalization due to mild rhabdomyolysis. Their CPK levels were 1,235 U/L, 1,728 U/L and 490 U/L. Our patient required endotracheal intubation for 7 days and hemodialysis for 27 days due to volume overload and deteriorated renal functions. His symptoms were improved and CPK levels came down gradually. He was asymptomatic with improving renal function and got discharged on hospital day 34.

**Objectives:** To report a cluster of Haff disease

**Methods:** Case report

**Results:** *Neolissocheilus soroides* is one of the species associated with Haff disease in Thailand.

**Conclusions:** This is a cluster of Haff disease experienced unexplained rhabdomyolysis in four patients who ate fish in 24 hours before onset of illness. *Neolissocheilus soroides* is one of the species associated with Haff disease in Thailand.



**APAMT** 2015  
Asia Pacific Association of Medical Toxicology  
14<sup>th</sup> International Scientific Conference  
Perth, Western Australia  
1-4 December 2015