

Toxic jellyfish situation in Thailand

ขอตรวจสอบคุณวุฒิ?

Lakkana Thaikruea, M.D., PhD.,¹ Potjaman Siriariyaporn, M.D., **DrPh.,²**
Rochana Wutthanarungsan, M.D.,² Punnarai Smithsuwan, M.Sc.²

¹Department of Community Medicine, Faculty of Medicine, Chiang Mai University,

²Epidemiology Bureau, Disease Control Department, Ministry of Public Health

Abstract This study aimed to describe the toxic jellyfish situation in Thailand. With ad hoc surveillance set up along Thai coastlines, a prospective study was conducted in four provinces to investigate new cases of toxic jellyfish envenomation. Hospitals and health centers were selected for a medical record review to assess morbidity and mortality. The results showed that at least 38 cases of toxic jellyfish were detected by the ad hoc surveillance. There were 381 cases of morbidity and mortality, their median age was 28 years, and 52% of them were foreigners. There was one case of death. The three most common areas of injury were the leg/knee/thigh (40%), arm/forearm/elbow (35%), and ankle/foot (13%). Three of the most common clinical signs were erythema (64%), rash (31%), and edema (26%). Common symptoms included pain (58%), burning sensation (45%), itching (15%), chest tightness (13%), and abdominal pain (10%). The box jellyfish is a health problem in Thailand. **Chiang Mai Medical Journal 2012;51(4):00-00.**

38 or 381

Keywords: Toxic jellyfish, envenomation, sign, symptom, situation

Introduction

Among toxic jellyfish, the box jellyfish is known as the most venomous marine animal in the world. It belongs to the Class cubozoa of jellyfish. There are two main groups of box jellyfish; multi-tentacle (Order Chirodopidae) and single-tentacle (Order Carypdeidae). *Chironex fleckeri* is the most lethal jellyfish in the multi-tentacle group. In severe cases, victims receive extensive skin lesions and develop cardiopulmonary failure. They usually feel a severe burning pain while swimming in shallow waters before unconsciousness leads to cyanosis and eventually death within minutes if no appropri-

ate first aid treatment is applied, such as cardiopulmonary resuscitation and vinegar wash [1, 2]. The clinical symptoms from the single-tentacle box-jellyfish are less severe, but some fatal cases have been reported. This group of jellyfish causes an Irukandji-like syndrome, which has bizarre systematic symptoms. It usually causes difficulty in diagnosis, due to a delay of about five to forty minutes after contact with the jellyfish. Symptoms of typical Irukandji syndrome comprise severe low back pain, generalized muscle cramps, vomiting, profuse sweating, anxiety, and difficulty in breathing. Some species cause severe hypertension [3, 4].

Address correspondence to: Lakkana Thaikruea, M.D., Department of Community Medicine, Faculty of Medicine, Chiang Mai University, Chiang Mai 50200, Thailand. E-mail: lthaikru@mail.med.cmu.ac.th

Received August 1, 2012, and in revised form 26 December, 2012.