

A case series of tetrahydropalmitine poisoning in hong kong

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Objective: To report a case series of 10 L-tetrahydropalmitine (L-THP) poisoning in Hong Kong.

Case series: A total of 10 cases of tetrahydropalmitine poisoning were reported to the Hong Kong Poison Information Centre in the years 2005 and 2006. All of the patients had intentional overdose of proprietary Chinese Medicine (PCM) sleeping pills with different brand names that were labeled as 30% L. Alkaloid or Ploygla Chinensis L. Alkaloid 30%. Clinical features included miosis (8 patients), vomiting (3 patients), dizziness (2 patients), impaired conscious level (10 patients) and hypoventilation (4 patients). 2 patients required intubation and ventilation support. Intravenous naloxone was given in 3 patients with response in 2 of them. All patients recovered within 24 hours. (Blood and urine toxicology screenings ruled out other hypnotic and opioid exposure. Target analysis for THP confirmed the diagnoses.) L-THP is registered as Rotundine® in the *Pharmacopoeia of the People's Republic of China* (2005 edition) as a fine pharmaceutical. It was first isolated from *Stephania* species but not *Polygala Chinensis* (1). These PCM sleeping pills were actually 30% L-THP pills with the remaining starch from sample analysis. We believed that were actually synthetic pharmaceuticals originally used as a pain-killer in China being re-packaged, mislabeled and marketed as herbal hypnotics in Hong Kong. It has also been marketed under the name of Jin Bu Huan, a health booster for long term use in the United States. Its long term use has caused hepatotoxicity (2). Acute overdose in children had caused life threatening respiratory suppression (3). **Conclusion:** Clinicians should be alerted for the possibility of tetrahydropalmitine poisoning in patients with overdose of PCM sleeping pills who present with opioid toxidrome. Naloxone may be tried but response was not reliable. Supportive management with attention to the need of airway protection and ventilation support is the mainstay of treatment. **Reference:** 1. But Paul PH. Jin Bu Huan Anodyne Tablets, a mislabeled and misclassified medicine. *J Hong Kong Med Assoc* 1994;46(4):302-305. 2. Horowitz RS *et al.* The clinical spectrum of Jin Bu Huan Toxicity. *Archives of Internal Medicine* 1996; 156(8): 899- 903. 3. CDC. Jin Bu Huan toxicity in children-Colorado, 1993. *MMWR* 1993;42:633-6.