

**2013 Hospital Authority Convention**

**On-going Poisoning Issues in  
Hong Kong**

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Consultant

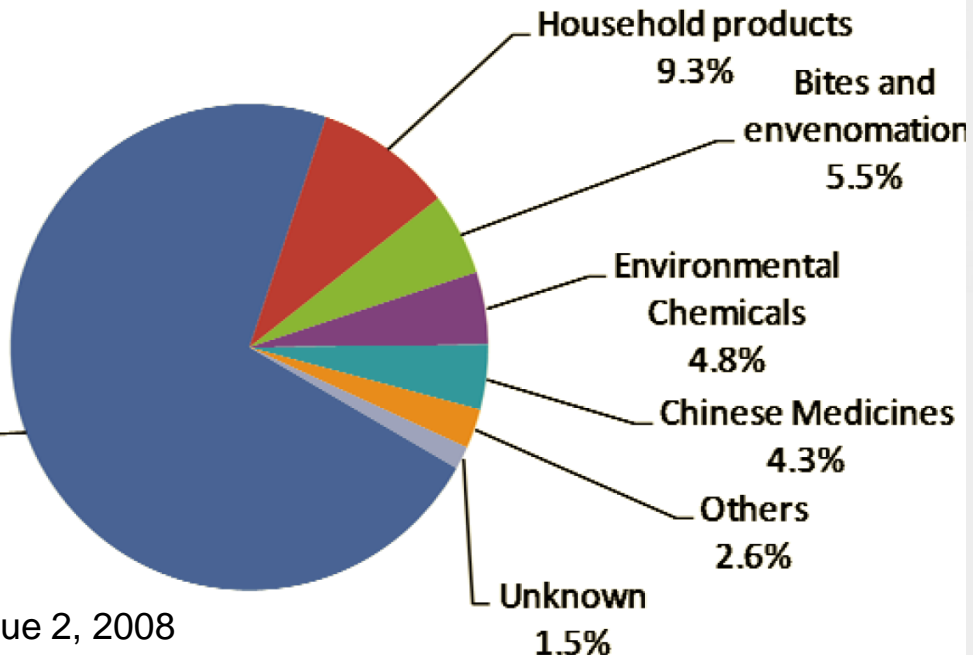
Prince of Wales Hospital Poison Treatment Centre

# Poisoning in Hong Kong

**Figure 3: Distribution of Types of Poison Agents Involved during July 2005 to June 2008**



**Western Medicines**  
71.8%



Poisoning Watch Volume 1, Issue 2, 2008

- There are some on-going poisoning issues which pose challenges for clinicians and cause significant threats to the public

# Poisoning Reporting in HA

## Restricted

### REPORT TO DEPARTMENT OF HEALTH ON POISONING OR COMMUNICABLE DISEASES

OTHER THAN THOSE SPECIFIED IN THE PREVENTION AND CONTROL OF DISEASE ORDINANCE

( CENTRAL NOTIFICATION OFFICE, CENTRE FOR HEALTH PROTECTION )

(FAX: 2477 2770; TEL : 2477 2772)

Disease [“✓”] below Suspected/Confirmed on \_\_\_\_ / \_\_\_\_ / \_\_\_\_ .(dd/mm/yyyy)

**Suspected Outbreak**

Please specify the nature of outbreak: \_\_\_\_\_

Number of persons affected: \_\_\_\_\_

**Infectious Disease** that is rare, severe or important (e.g. Acute flaccid paralysis, *Vibrio vulnificus* infection etc.)

Please specify: \_\_\_\_\_

**Chinese medicine-related Adverse Event**

Please specify: \_\_\_\_\_

(Please attach supplementary form for reporting Chinese medicine-related adverse events)

**Heavy Metal Poisoning**

Please specify: \_\_\_\_\_

**Other Poisoning**

Please specify: \_\_\_\_\_

# “Hidden” Aconite Poisoning

## MEDICAL PRACTICE

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### Aconite poisoning in camouflage

#### 隱藏的烏頭中毒病例

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The Toxicology Reference Laboratory has confirmed 10 cases of aconite poisoning from March 2004 to May 2006. In four of these 10 cases, the aconite herb was not listed in the written prescription. We report these four cases to highlight the problem of ‘hidden’ aconite poisoning.

在2004年3月至2006年5月期間，醫院管理局毒理學實驗室確認了10宗烏頭中毒的個案。其中四宗，藥單上均沒有列明烏頭這草本植物。本文報告這四宗病例以帶出烏頭中毒的潛在問題。

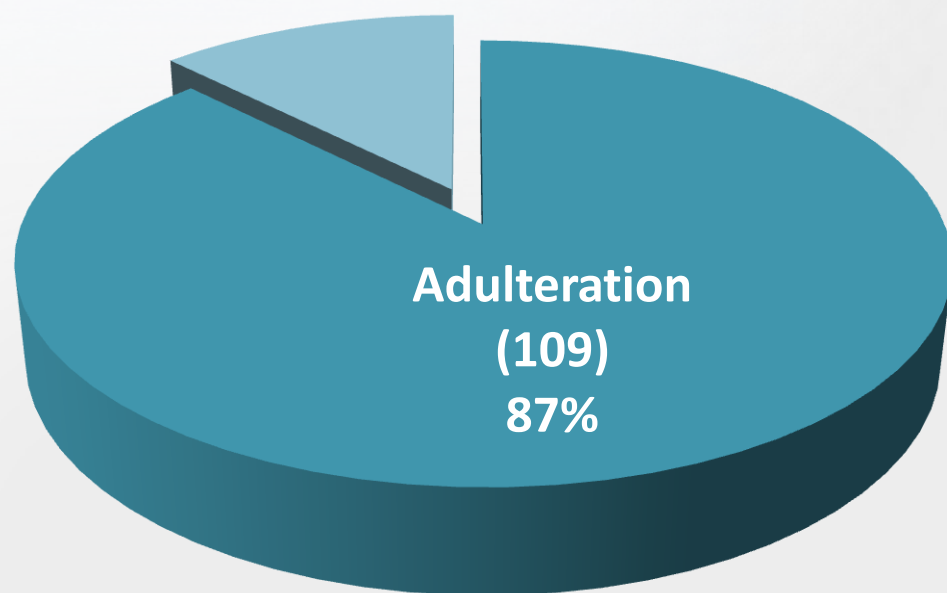
WT Poon 潘永達  
CK Lai 賴志剛  
CK Ching 程楚君  
KY Tse 謝家欣  
YC So 蘇睿智  
YC Chan 陳耀祥  
LM Hau 侯立文  
TWL Mak 麥永禮  
AYW Chan 陳恩和

# “Hidden” Aconite Poisoning

- From March 2004 to May 2006, 10 laboratory confirmed cases of aconite poisoning
- 4 cases had **NO** aconite herb listed in the written prescription
- Yunaconitine was the aconitum alkaloid detected in all cases (urine samples + some herbal booth/remnants)
- ? Contamination
- ? Quality control problem

# Poisoning by Slimming Products

- N = 125



- Appetite suppressant e.g. sibutramine, fenfluramine (95%)
- Laxative e.g. phenolphthalein, bisacodyl (35%)
- Thyroid hormone (19%)
- Cardiovascular drugs e.g. spironolactone, hydrochlorothiazide, propranolol (11%)
- Others e.g. NSAIDs, sildenafil...

| Year         | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|--------------|------|------|------|------|------|------|------|------|-------|
| No. of cases | 4    | 10   | 9    | 23   | 18   | 14   | 19   | 12   | 109   |

# Case 1

- F/37
- Admitted for acute psychosis
- Had auditory and tactile hallucination
  
- Patient reported taking a slimming agent for 2 months with significant weight loss

邦力健纖維體清脂素

Listed ingredients

- 膳食纖維
- 低聚殼聚糖等

Analysis by TRL

- Sibutramine
- Phenolphthalein

# New Clinical Problems Identified

ARTICLE

## Psychosis associated with usage of herbal slimming products adulterated with sibutramine: a case series

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*Context.* Sibutramine, or its structurally related analogs, is often found as an adulterant in proprietary herbal slimming products in Hong Kong. A few solitary case reports of sibutramine-associated psychosis have been published since 2000. As the only tertiary referral center for clinical toxicology analysis in Hong Kong, we noticed that psychosis was an unusually common feature in patients taking “herbal slimming products” adulterated with sibutramine or its structurally related analogs over the past 5 years. *Objective.* To examine the association between psychosis and the use of sibutramine-adulterated herbal products, in an attempt to elucidate this possible adverse drug reaction. *Methods.* This retrospective study reviewed all cases hospitalized with psychotic symptoms confirmed to have used herbal slimming products adulterated with sibutramine, or its analogs, between January 2004 and October 2009. The cases’ clinical features, outcome, drug history, and analytical findings of the offending slimming products were studied. *Results.* Among the 16 confirmed cases, 15 (94%) were female; the median age was 19 years (range: 15–47). Auditory hallucination was documented in 10 (63%), visual hallucination in 6 (38%), persecutory ideas in 6 (38%), delusions in 4 (25%), and suicidal ideation in 2 (13%). For 20 “herbal” slimming products analyzed, 16 were found to have been adulterated with sibutramine, 2 with *N*-desmethyl-sibutramine, and 1 with *N*-bisdesmethyl-sibutramine. Other concomitant adulterants were also found and included phenolphthalein in 9, fenfluramine, mazindol, animal thyroid tissue in 2, hydrochlorothiazide and spironolactone in 1. Eight patients disclosed the source of the products: four through the Internet, one obtained over-the-counter locally, with three acquired outside Hong Kong. *Conclusion.* Slimming products claimed “herbal” in origin could often be adulterated with sibutramine and other Western medications. We observed an association between the use of these products and psychotic features. Further studies are warranted to study whether these adverse events are an uncommon adverse drug reaction of sibutramine.



# Psychosis associated with sibutramine in herbal slimming products

- From Jan 2004 to Oct 2009
- 16 patients with psychotic symptoms confirmed to have used herbal slimming products adulterated with sibutramine or its analogs
- Median age = 19 years (range: 15-47)
- Clinical features:
  - Auditory hallucinations – 10 (63%)
  - Visual hallucinations – 6 (38%)
  - Persecutory ideas – 6 (38%)
  - Delusions – 4 (25%)
  - Suicidal ideation – 2 (13%)

# Psychosis associated with sibutramine in herbal slimming products

- Median recovery time: 2 weeks (3 days to 3 months)
- Content of sibutramine per capsule (8 products): median = 12.5mg, range: 2.8 – 19.6 mg
- Recommended dose: 10mg – 15mg daily
- Source of the products (8 patients):
  - 4 purchased from the Internet
  - 3 from outside HK
  - 1 from over-the-counter in HK

## Case 2

- M / 70
- History of HT and OA knee
- Admitted for pneumonia
- Noted to have swollen face, easy bruising
- Further history reviewed that he has 40 pounds weight gain in recent 1 year
- Blood test:
  - Potassium 3.2 mmol/L
  - Creatinine 110 umol/L
  - Glucose 12 mmol/L

## Case 2

- Patient has chronic knee pain for 2 years
- Taken a proprietary Chinese medicine (pCM) for 1 year with excellent pain relief

# CO風濕骨痛寧膠囊

Listed ingredients:

- 人參、血竭、全蝎、白花蛇、曼陀羅、透骨草、土元

Analysis by Toxicology Reference Laboratory:

- prednisone acetate, paracetamol, indomethacin, diclofenac, ibuprofen, naproxen, hydrochlorothiazide, codeine, riboflavine

## Case 3 & 4

- In April 2013, two patients (a couple) developed gastroenteritis symptoms at about 11 hours after eating wild mushroom which was self-picked in Shing Mun Reservoir.
- Both patients developed liver failure in 60 hours
- The involved mushroom was confirmed to be hepatotoxic amanita species



## Case 5

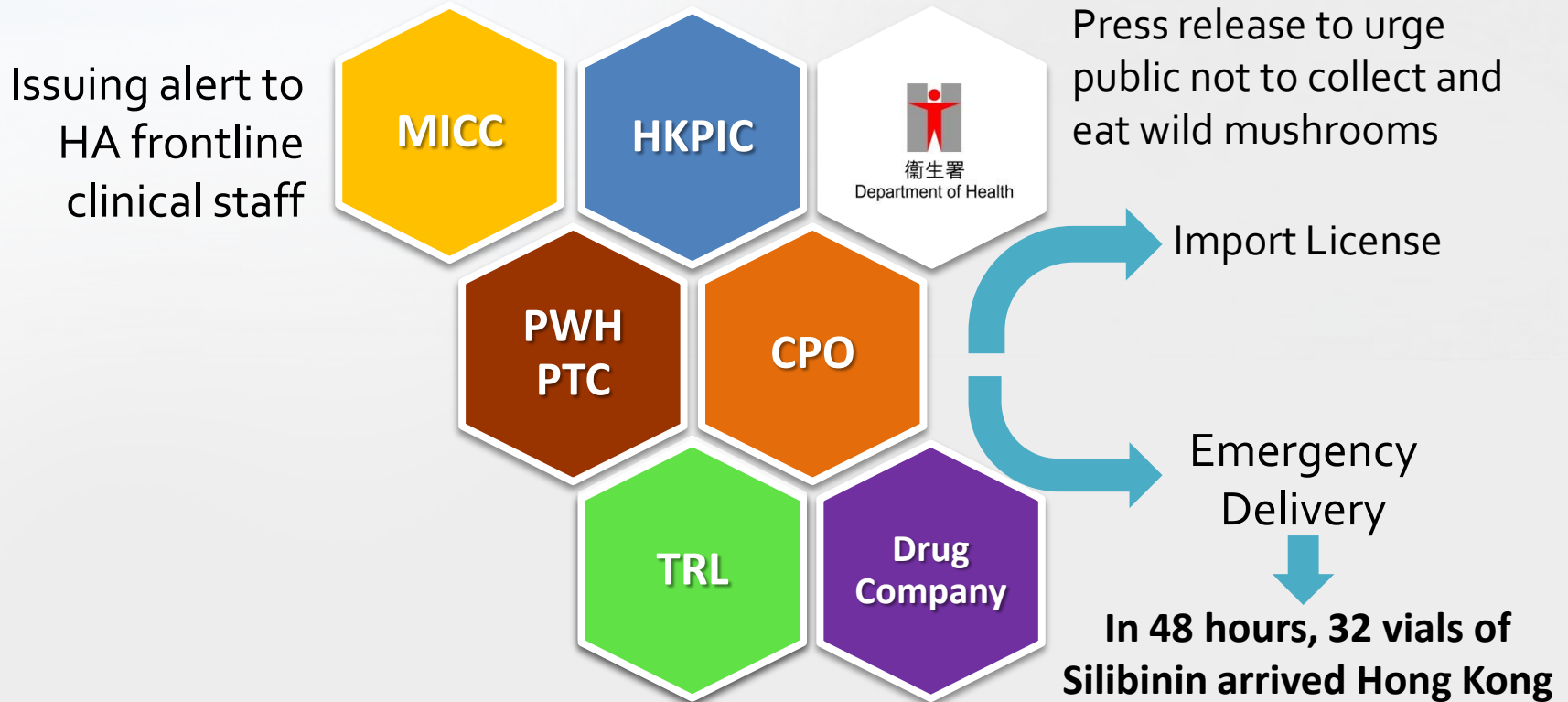
- At about the same time, another patient developed poisoning after ingestion of wild mushroom which was self-picked at hillside of Tai Mo Shan

# Amanita Poisoning

- Poisoning confirmed by identification of toxin by TRL
- Management:
  - Silymarin (oral)
  - Silibinin (intravenous): only 8 vials available



# Collaboration on Management of Poisoning



- CPO: Chief Pharmacist's Office, HAHO
- HKPIC: Hong Kong Poison Information Centre
- PWHPTC: Prince of Wales Hospital Poison Treatment Centre
- TRL: Toxicology Reference Laboratory
- MICC: Major Incident Control Centre, HAHO

# Summary

- Apart from overdose of western drugs, there are some on-going poisoning issues which pose challenges for clinicians and cause significant threats to the public
- Multiple agents/products:
  - Chinese medicine (herbs or proprietary), health products, environmental toxins, etc.
- Heterogeneous etiologies:
  - Adulteration, contamination, misidentification, erroneous substitution, accidental, etc.
- A multi-disciplinary approach to tackle the challenges