

## Editorial

### **Hong Kong Poison Information Centre: a new chapter in the development of clinical toxicology in Hong Kong**

香港中毒諮詢中心：香港臨床毒理學發展的新時代

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Clinical toxicology is a multi-disciplinary subject. Poisoned patients are usually first seen by the emergency physician. Moderate to severe cases are admitted into the medical or paediatric ward or the intensive care unit, depending on age and severity. Laboratory tests are done and interpreted by the chemical pathologist. If the patient dies, the forensic pathologist will investigate the cause of death. The community physician might need to investigate a poisoning outbreak. The psychiatrist might be involved in handling the mental sequelae of substance abuse. Yet for the past decade, while Hong Kong was rapidly developing in various aspects of clinical medicine, clinical toxicology has been grossly lagging behind. It has been ignored by the Government and most of the specialties mentioned above.

A brief survey on the internet indicates that there are a total of 316 poison centres in the world. There are 67 centres in the USA alone, 9 in Canada, 6 in UK, and 5 in Australia. In Asia, China has 7, India 4, Japan 3, Indonesia 3, and Vietnam 2. Malaysia, Singapore, Philippines, Cambodia, Taiwan, and Nepal all have their own poison centre. However, there are only 9 centres in the whole of Africa. So, one may

generalise that the number of poison centres is roughly related to the socio-economic status and complexity of the countries. Yet for Hong Kong, despite being a relatively prosperous city, there is not a full-scale poison control centre even up to the time of this writing.

Historically in Hong Kong, toxicology information can be obtained from the Drug & Poisons Information Bureau (DPIB), which was established in 1988 by the late Prof. D.M. Davies of the Department of Clinical Pharmacology of the Chinese University of Hong Kong. The DPIB, with its current director Prof. Thomas Chan, has gained wide recognition internationally, with scores of publications appearing in peer-reviewed journals and representing most of the pioneer work in clinical toxicology in Hong Kong. However, due to resource constraints, the poison consultation service provided became very erratic in the last one year and could not meet the demand of acute care physicians.

Meanwhile, development in Traditional Chinese Medicine (TCM) in Hong Kong has triggered off a more serious approach to Chinese Medicine poisoning. Many training activities were initiated by the Clinical Toxicology Task Force for Chinese Medicine of the Hospital Authority (HA) which organised herbal toxicology workshops, set up a reporting mechanism of TCM poisoning and established a TCM poisoning database. But by far the most important step forward was the formation of the Toxicology Reference Laboratory in Princess Margaret Hospital in 2004 for

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the detection and quantification of herbal and novel toxins. Headed by Dr. Albert Chan, the laboratory did a great job in the past year by detecting a number of local toxins, resulting in the withdrawal of quite a number of toxic TCM products from the market plus avoiding several community outbreaks of TCM poisoning.

Toxicology training started in emergency medicine some ten years ago, where isolated emergency physicians were sent to be trained in overseas poison control centres. Upon the return of some of these emergency physicians, regular toxicology training was started in early 2000 in the United Christian Hospital (UCH) where toxicology meetings were held in the emergency department on alternate weeks for the senior staff. This was required to meet the change of policy under which some of the less severely poisoned patients would be kept and managed in the observation ward instead of being admitted. This change of policy has achieved a reduction in admission rate of poisoned patients from 90% to 50% without increasing the morbidity. By August 2000, toxicology training was extended to eight emergency departments whose interested emergency physicians would join and attend the monthly clinical toxicology meeting. The meetings turned out to be so successful that they became a formally approved educational function of the Hong Kong College of Emergency Medicine (HKCEM) in March 2001.

Co-hosting with the New York City Poison Control Centre, the College has also brought in a well-established 2-day Clinical Toxicology Course to Hong Kong. Since 2002, a total of five courses has been held and some 400 local and overseas candidates from various specialties attended the course with great satisfaction. In January 2005, the College moved one step further with the UCH toxicology team and organised an 80-hour certificate course in clinical toxicology involving 8 tutors and 16 tutees.

From these training activities, the above parties came together and agreed that a society must be formed to push ahead the development of clinical toxicology. Hence, the Hong Kong Society of Clinical Toxicology

(HKSCCT) was formed on 1st January 2005. In the inaugural speech of the HKSCCT, Dr. York Chow, Secretary for Food, Environment & Health, expressed his concern on the urgency of the problem and acknowledged that some 15 million dollars would be injected into the public sector to enhance the toxicology service for the coming two years starting from 2005. The fund would be used to beef up the Toxicology Reference Laboratory, improve toxicovigilance and establish a poison information centre in the Hospital Authority.

After three months of preparation, the Hong Kong Poison Information Centre (HKPIC) was set up in UCH (Figure 1). It was opened on 1st July 2005 for toxicological consultation from all health care professionals in Hong Kong. Initially, it opens only during office hours but will be extended to 12 hours daily (9 am-9 pm) starting from 1st January 2006. The Poison Information Centre combined the professional input from both the UCH toxicological team (which had been taking toxicology consultation from the Kowloon East Cluster for a few years) and the DPIB. The Poison Information Centre retains the old telephone number of the DPIB (2635-1111) and provides management advice on poisoning by drugs, toxins, chemicals, herbal and household products. Non-urgent consultation can also be sent to the HKPIC by fax (3513-5649) or email (poisoninfo@ha.org.hk). Arrangement has also been made with six major emergency departments to provide lists of poisoning cases for toxico-vigilance.



Figure 1.

The formation of the HKPIC represents a major step forward in the development and sub-specialisation of clinical toxicology in Hong Kong. Fellows trained in toxicology are recruited to work in the Poison Information Centre where systematic toxicology training is being organised and local toxicology database compiled.

Since the HKCEM is training more and more Fellows each year, it is time for some of these Fellows to develop subspecialty interest. As acutely poisoned patients present to the emergency departments, their initial management largely determines the final outcome. Clinical toxicology would likely be a significant outlet for our new Fellows and opens a new horizon for aspiring emergency physicians to develop and explore.

For the future development of the toxicology service in Hong Kong, a working group has been set up by the Department of Health with the task of submitting a proposal by May 2006, advising the Government on how the future Poison Control Centre should be after 2007. Although the drafting of the proposal has not been finalised yet, all the members agreed that a comprehensive toxicology service should include four

major aspects, namely, toxicology laboratory, toxicovigilance, poison information service and poison treatment service. Up to the present moment, there is no provision for a toxicology treatment centre (or unit) in the Hospital Authority. Nor is there any specialists dedicated to the inpatient treatment of poisoned patients. In a preliminary review of the poisoning cases collected in the past, a significant number of these cases could be improved one way or another in the emergency departments or in the wards. We hope by setting up poison treatment units, poisoned patients admitted into HA hospitals would receive specialist standard care in par with other subspecialties of clinical medicine.

Finally, with the setting up of HKPIC, clinicians have better support in their care of poisoned patients. However, it is only when poison treatment units are established can the four pillars of comprehensive toxicology service be completed. We hope that in two years' time Hong Kong can secure its four pillars in the clinical toxicology service. And on the foundation of these four pillars, we shall build a comprehensive poison control centre so that we can protect better the Hong Kong citizens from the increasingly toxic world of the modern society.