

## Traditional Chinese Medicine use among emergency patients in Hong Kong 香港急症病者中，傳統中藥的使用

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**Introduction:** Traditional Chinese Medicine (TCM) use has been believed to be common in Hong Kong but no data existed on its prevalence among emergency patients. We conducted a prospective survey to study the prevalence of its use, the type of TCM use, frequency and nature of associated adverse reactions. **Methods:** All accident & emergency department (AED) attendances at the United Christian Hospital were screened by the triage nurse and attending doctor for TCM use and its type in a consecutive 31 day period. The causal relationships between the TCM and their presenting illness were also assessed and decided by the doctor in-charge. **Results:** 291 out of 21,475 patients (1.4%) reported TCM use within one week. Among them, 117 (40.2%) consumed Chinese herbal medicine, 75 (25.8%) took proprietary Chinese medicine, 1 (0.3%) took both, 96 (33.0%) received topical treatment and 2 (0.7%) were unclassified, with 22 out of the 291 TCM users (7.6%) presented for TCM-related toxicity. Most complications were mild, the commonest ones being dermatitis after topical treatment (68.2%) and allergic reaction after oral intake (22.7%). **Conclusion:** A small number of patients took TCM treatment shortly before AED consultation. Most TCM-related toxicities were mild and the commonest reactions were dermatitis and systemic allergy. (*Hong Kong j.emerg.med.* 2007;14:151-153)

**簡介：**傳統中藥的使用，在香港被認為是相當普遍，但在急症病者中的流行程度並沒有數據存在。我們進行一個前瞻性的調查去研究傳統中藥使用的流行程度，種類，及有關副作用的性質和頻率。**方法：**在連續 31 天的時段內，所有到聯合醫院急症室就診人士由分流護士及主診醫生審查傳統中藥的使用及種類。主診醫生並評估及決定傳統中藥與就診病症的成因有否關聯。**結果：**21,475 名病者中 291 名(1.4%) 回報在一星期內有使用傳統中藥。他們當中，117 名(40.2%) 服用中草藥，75 名(25.8%) 服用專賣中成藥，1 名(0.3%) 服用以上兩種，96 名(33.0%) 接受外敷治療及 2 名(0.7%) 無法分類。291 名傳統中藥使用者中，22 人(7.6%) 呈現與傳統中藥有關的中毒。大部份為輕微的，最常見的併發症為使用外敷治療後的皮膚炎(68.2%) 及口服後的過敏反應(22.7%)。**總結：**有少數急症室病者在求診前不久接受過傳統中藥治療。大多數與傳統中藥有關的中毒為輕微，而最常見的反應為皮膚炎及全身過敏。

**Keywords:** Chinese herbal drugs, Chinese traditional medicine, drug toxicity, medicinal plants, prevalence

**關鍵詞：**中草藥、傳統中藥、藥的毒性、草藥、流行程度

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### Introduction

Traditional Chinese Medicine (TCM) use is thought to be very popular in Hong Kong. However, no information existed on its prevalence among patients presenting to hospitals. It is important to be aware of

its use, at least shortly before presentation to the hospital. Clinicians need to consider the possibility of adverse reactions and toxicities during the diagnostic process, and when prescribing, herb-drug interaction should be cautioned against. Although the medical literature is not short of case reports on TCM poisoning, the latter were largely limited to the more severe end of the spectrum, mostly due to rare therapeutic mishaps from herb adulteration or contamination. In this study, we prospectively studied the true prevalence of TCM use and the frequencies and profiles of adverse reactions among patients presenting to an accident & emergency department (AED).

## Methods

In the 31-day period starting from 2nd August 1999 till 1st September 1999, all patients attending the AED of the United Christian Hospital, a district hospital in Hong Kong serving a population of more than half-a-million, were studied. Both the triage nurse and the attending doctor directly questioned the patient or the accompanying persons (if the patient could not give a proper history) for the use of TCM within the preceding one week.

TCM in our study was defined as Chinese medicine intended for specific illness that was prescribed either by Chinese Medicine practitioner or bone-setter, self-prescribed or bought over the counter. Supplements or herbs used in food recipes intended for promotion or maintenance of health were excluded. For those patients who gave a positive response and had received treatment fulfilling the definition of TCM in our study, questionnaires were filled-in by the attending doctor. The type of TCM used, reasons for its usage, patient's presenting complaints, diagnosis and causation assessment were recorded. The questionnaires were collected and the results analysed. The types of TCM were classified according to the Chinese

Medicine Ordinance (Chapter 549 Section 2). The disposal and outcome of all the patients with TCM exposure were traced and documented.

## Results

A total of 21,475 patients attended the AED during the study period, with 291 or 1.4% of them having received TCM treatment for illness in the preceding one week before presentation.

Among them, 117 (40.2%) received Chinese herbal medicine (CHM) dispensed from Chinese herbal shops for illness, 75 patients (25.8%) took proprietary Chinese medicine (PCM), and 96 (33.0%) patients received topical Chinese medicine treatment for musculoskeletal complaints. One patient (0.3%) took both CHM and PCM within the week before presenting to the AED. Two patients (0.7%) received treatments that were unclassifiable.

A total of 22 patients visited the AED for illness caused by TCM use as determined by the physician in-charge (Figure 1). The commonest adverse event was local skin reaction after topical herbal treatment, with 15 patients developing local reaction diagnosed as dermatitis or allergic dermatitis while 5 patients developed rash or urticaria after oral ingestion of herbal treatment but none developed hypotension or airway problem. One patient developed vomiting and one had diarrhoea shortly after CHM intake.

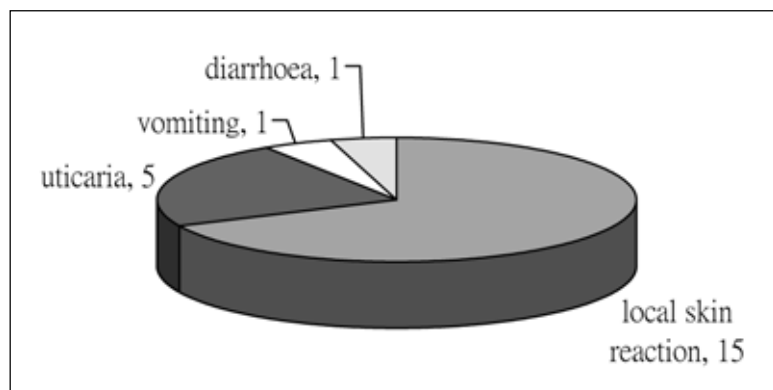


Figure 1. Adverse reaction breakdown.

All cases judged to have TCM-related adverse reaction were mild except one who developed infected dermatitis after topical treatment from a bone-setter. She recovered uneventfully after in-patient antibiotic treatment. The other 21 cases were treated and discharged after a short period of observation in the AED.

## Discussion

Our study revealed only 1.4% of AED attendance had received TCM treatment. This was unexpectedly low when compared with the 2002 Government survey result which found 18.4% of medical consultations in Hong Kong were provided by Chinese Medicine practitioners.<sup>1</sup> Several factors might have affected the finding. Apart from the short inclusion period of TCM use within one week, the definition of TCM was very specific in this study – traditional Chinese medicinal product that was used for the treatment of some illness. The general use of Chinese herbs for the purpose of health maintenance or disease prevention was excluded. The reason was that a lot of Chinese herbs were commonly used as food ingredients as well. Herbs like ginkgo, bitter almond, ginseng, etc. can easily be found in any local Chinese diet especially in soup recipes. To include all Chinese herbal ingredient exposure for an average Hong Kong Chinese may count in a lot of trivial exposure, mostly food consumption. The authors believed that specific TCM treatment for illness should be more potent and should possess higher levels of pharmacologically active ingredients, and hence more likely to develop adverse drug reactions or drug interaction with western drugs.

Among the TCM users, 22 out of the 291 or 7.6% presented for adverse effects caused by the herbs. The commonest reactions were local skin problem after topical Chinese medicine treatment. The adverse reaction is usually mild unless complicated by infection as shown in the only case of admission in this cohort. The exact causes of these reactions were not fully investigated. Local allergic reaction to specific herbs, irritant effect from certain ingredients and infective agent contamination are some of the possibilities.

Research may be warranted in this commonest TCM-related adverse reaction presenting to AED as found in our study.

Allergic skin reaction after oral intake came second, which was all mild in nature. However, no specific identification of single causative ingredient had been possible due to the poly-ingredient nature of TCM. Availability of legible prescription formulas of TCM as a practice standard would be helpful in drawing up a list of causative herbs, in order to be put down in allergy cards to avoid future re-exposure.

Although the medical literature is not short of TCM adverse reactions, most were only case reports of severe cases.<sup>2-4</sup> Our study suggested that most of the reactions were actually mild. However, the complete adverse reaction profile of TCM can only be studied prospectively with the cooperation of Chinese Medicine practitioners and Chinese Medicine pharmacists.

## Conclusion

A small number of AED patients were exposed to TCM shortly before their presentation. A number of them came for TCM-related adverse reactions. Most of the adverse reactions were mild, and the commonest being local skin reaction, to be followed by allergic rash after oral consumption.

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