Objective: To update our epidemiological knowledge of acute poisoning in Hong Kong. Methods: A multicentred prospective study was conducted for six months in six major accident and emergency departments in Hong Kong. A specially designed form was used to collect demographic data, type of poison involved, cause of poisoning, management, disposal as well as final outcome of the poisoned patients. Results: A total of 1,467 patients (male: 588, female: 879) were included in the study. Most of them were young adults (32% were between 20 and 40 years old). Suicidal attempt (64%) was the most common cause of poisoning. Notably, 379 (26%) patients took more than one poison. Among the 2,007 counts of poison taken, sleeping pills (24%) and analgesics (18%) were the most commonly used drugs and paracetamol was the commonest single ingredient involved in poisoning. Most patients were treated with supportive measures, and about 40% and 15% of the patients were given gastrointestinal decontamination and specific antidotes respectively in their management, in which activated charcoal and N-acetylcysteine were the most common. Concerning disposal from the emergency department, 91% of the poisoned cases required in-patient management. Most patients had an uneventful recovery but 5 (0.3%) had significant disability and 21 (1.4%) died. Suicidal carbon monoxide poisoning was the leading cause of mortality in our study. Conclusions: Most acute poisonings in Hong Kong were suicidal in nature and paracetamol was the commonest agent. Activated charcoal was the most commonly used decontamination method and most patients had an uneventful recovery.

Introduction

Poisoning is an important cause of significant morbidity and mortality and "Injury and Poisoning" ranked as the fifth commonest cause of death in Hong Kong in 2000. Different places have their own poisoning patterns which may have impact on the initial management of the acutely poisoned patient. Although there are good overseas data concerning poisoning such as the Toxic Exposure Surveillance System (TESS), updated data of poisoning in our locality are largely unexplored. Most of our current data of acute poisoning are limited to case reports or series. One of the reasons that we lack a global view of the poisoning situation in Hong Kong is that poisoning is not a mandatory reportable disease under the current medical system and we do not have a formal poison control centre to collect data. Since most acutely poisoned patients are seen initially in emergency departments, emergency physicians are in a good position to collect data of acute poisoning. Therefore we conducted this multi-centre study to gather information of the current poisoning situation locally. Hopefully, it might help the medical profession to manage the acutely poisoned patient, as well as serving as a guide for future research.

Methods

From 1st January 2001 to 30th June 2001, six accident and emergency departments (AED) in Hong Kong took part in this study. They included the Pamela Youde Nethersole Eastern Hospital, Queen Elizabeth Hospital, Queen Mary Hospital, Tuen Mun Hospital, United Christian Hospital and Yan Chai Hospital. Attending physicians of the involved departments recruited acutely poisoned cases basing on their clinical judgement. Data of acute poisoning were then collected in a standard data sheet. These included demographic data, cause of poisoning, type of poison involved, use of decontamination and antidotes, disposal of the poisoned patients in the AED and their final outcome. The data were then analysed.

Results

During the study period, a total of 1,467 cases were collected. There were 588 male (40%) and 879 female (60%) patients included in the study. The age distribution of the acutely poisoned patients is shown in Figure 1, with the 21-30 years group being the commonest and 32% were between 20 and 40 years old.

The causes of poisoning are shown in Figure 2 with suicidal attempt (64%) being the most common. For types of poison involved, the result is shown in Figure 3. Notably, 379 (26%) patients took more than one poison (Figure 4). As a result, a total of 2,007 counts of poison had been taken by the 1,467 patients. Out of the 2,007 counts, the commonest group was...