Outcome of out-of-hospital cardiac arrest in a regional hospital in Hong Kong

This study evaluated the resuscitation outcome of adult patients presenting with non-traumatic out-of-hospital cardiac arrest (OHCA) to a regional hospital in Hong Kong. Out of 876 patients of non-traumatic OHCA, 12.7% survived to hospital admission. Only 0.5% of the 876 patients survived to hospital discharge and at one year after discharge. The number needed to treat (NNT) for prehospital asystolic cardiac arrest to have one survival to discharge was 795. (Hong Kong j.emerg.med. 2005;12:224-227)

Keywords: Arrhythmia, cardiopulmonary resuscitation, emergency medical services, heart arrest, treatment outcome

Introduction

Patients presenting with non-traumatic out-of-hospital cardiac arrest (OHCA) are frequently encountered in emergency departments (ED). Resuscitation is attempted in most cases but the outcome varies with reported survival rates in previous local studies ranging from 1.25% to 3.0%. Is there a particular group of patients with a better outcome? This study was to evaluate the resuscitation outcome of adult patients presenting with non-traumatic OHCA to a regional hospital in Hong Kong.

Methods

Setting

The study was performed in the emergency department of a regional hospital in the western cluster of the New Territories in Hong Kong, which had an annual attendance of 200,000 to 270,000 during the study period from 2001 to 2003 (Tuen Mun Hospital Annual Statistics).

Selection criteria

All patients aged 18 years or above presenting with non-traumatic OHCA during the period 1st January 2001 to 31st December 2003 were included. Resuscitation was performed in all patients presenting with non-traumatic OHCA, except those patients who had already developed post-mortem changes on presentation to the ED. Only patients of probable ‘primary’ cardiac arrest were included and those patients associated with toxicological causes were excluded.