

論文の欧文概要

(Name) Shinnosuke Kitano

(Title)

Evaluation of outcomes after EMS-witnessed traumatic out-of-hospital cardiac arrest caused by traffic collisions

(Abstract)

Introduction: The survival rate of patients with traumatic cardiac arrest is 3% or lower. Cardiac arrest witnessed by emergency medical services (EMS) accounts for approximately 16% of prehospital traumatic cardiac arrests, but the prognosis is unknown. We aimed to compare the 1-month survival rate of cardiac arrest witnessed by EMS with that of cardiac arrest witnessed by bystanders and unwitnessed cardiac arrest in trauma victims; further, the time from injury to cardiac arrest was assessed. **Methods:** This analysis used the Utstein Registry in Japan and included data of 3883 patients with traumatic cardiac arrest caused by traffic collisions registered between 2014 and 2019 in Japan. **Results:** The 1-month survival rate was 10.9% in the EMS-witnessed cardiac arrest group; this was significantly higher than that in the bystander-witnessed (7.2%) and unwitnessed (5.6%) cardiac arrest groups ($P < 0.01$). **Conclusion:** It is important to prevent progression to cardiac arrest in trauma patients with intact respiratory function and pulse rate at the time of contact with EMS. A system for early recognition of severe trauma is needed, and a doctor's car or helicopter can be requested as needed. We believe that early recognition and prompt intervention will improve the prognosis of prehospital traumatic cardiac arrest.