

# Prehospital epinephrine aids out-of-hospital pediatric cardiac arrests

January 28 2020

---



Prehospital administration of epinephrine may aid pediatric patients

following out-of-hospital cardiac arrests (OHCAs), according to a study published in the Jan. 21 issue of the *Journal of the American College of Cardiology*.

Tasuku Matsuyama, M.D., Ph.D., from the Kyoto Prefectural University of Medicine in Japan, and colleagues assessed the effect of prehospital [epinephrine](#) administration by emergency medical service personnel among [pediatric patients](#) (aged 8 to 17 years) with OHCA between 2007 and 2016.

The researchers identified 3,961 pediatric patients with OHCA, of whom 7.7 percent received epinephrine. A total of 608 patients were included after time-dependent propensity score-sequential matching. In the matched cohort, there were no significant noted differences between the epinephrine and no-epinephrine groups in one-month survival (epinephrine: 10.2 percent; no epinephrine: 7.9 percent; risk ratio [RR], 1.13; 95 percent confidence interval [CI], 0.67 to 1.93). Favorable neurological outcomes were also similar (epinephrine: 3.6 percent; no epinephrine: 2.6 percent; RR, 1.56; 95 percent CI, 0.61 to 3.96). However, the epinephrine group had a higher likelihood of achieving prehospital return of spontaneous circulation (epinephrine: 11.2 percent; no epinephrine: 3.3 percent; RR, 3.17; 95 percent CI, 1.54 to 6.54).

"We recommend that prehospital epinephrine [administration](#) should be included in international guidelines for [cardiopulmonary resuscitation](#) to enhance the survival of pediatric OHCA patients," a coauthor said in a statement.

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

[Editorial \(subscription or payment may be required\)](#)



Citation: Prehospital epinephrine aids out-of-hospital pediatric cardiac arrests (2020, January 28)  
retrieved 6 May 2024 from

<https://medicalxpress.com/news/2020-01-prehospital-epinephrine-aids-out-of-hospital-pediatric.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.