Sudden cardiac arrest in athletes: Prevention and management

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"Establishing effective resuscitation protocols and increasing the availability of automated external defibrillators in settings where competitive sport is undertaken are the most effective strategies in helping reduce the incidence of sudden cardiac death among athletes," says Dr. Paul Dorian, a cardiologist at St. Michael's Hospital and the University of Toronto, Toronto, Ontario.


It’s marathon season, and every so often a news report will focus on an athlete who has collapsed from sudden cardiac arrest. Although uncommon, these events get attention. A new review in CMAJ (Canadian Medical Association Journal) looks at recent evidence to help physicians prevent and manage the risk of sudden cardiac arrest in competitive athletes.

Sudden cardiac arrest is rare and, in young athletes, is usually the first sign of heart disease, although one study found that 29% of athletes had symptoms of underlying disease before an arrest. It is very difficult to predict or prevent, and screening programs are challenging and of uncertain benefit. Physicians should routinely ask athletes if they feel dizzy, short of breath or experience chest pains during or after exercise and ask about family history to determine if there may be an inherited condition.

Survival rates after sudden cardiac arrest in athletes are quite high when automated external defibrillators are used.