

Komocija srca kao uzrok iznenadne srčane smrti u sportaša Commotio cordis as cause of sudden cardiac death in athletes

Zdravko Babić*

Klinički bolnički centar Sestre milosrdnice, Zagreb, Hrvatska

University Hospital Centre
"Sestre milosrdnice", Zagreb,
Croatia

KLJUČNE RIJEČI: komocija srca, sportaš, nagla srčana smrt

KEYWORDS: commotio cordis, athletes, sudden cardiac death.

CITATION: Cardiol Croat. 2014;9(9-10):448.

***ADDRESS FOR CORRESPONDENCE:** Klinički bolnički centar Sestre milosrdnice, Vinogradnska 29, HR-10000 Zagreb, Croatia. / Phone: +385-98-383-639 / E-mail: zbabic@net.hr

Komocija srca je iznenadna srčana smrt kao posljedica ventrikularne fibrilacije uzrokovane iznenadnom, tupom, nepenetrantnom, naizgled neopasnom traumom prednje stijenke prsnog koša. Stanje je najčešće kod mladih, pretežito muških sportaša i jedno je od vodećih uzroka iznenadne srčane smrti u mladih sportaša, nakon hipertrofične kardiomiopatije i kongenitalnih abnormalnosti koronarnih arterija. Ovaj medicinski entitet najčešće je opisivan u bejzbolu, ali i u hokeju, softballu, lakrosu, karateu i drugim sportskim aktivnostima u kojima relativno tvrdi i kompaktni projektil ili tjelesni kontakt uzrokuje udar u područje prekordija osobe. Rana kardiopulmonalna resuscitacija i brza defibrilacija može značajno smanjiti rizik od smrti. Korištenje odgovarajućih zaštitnika prsnog koša i druge sigurne opreme može prevenirati pojavu ovoga životno ugrožavajućeg stanja.

Commotio cordis is sudden cardiac death due to ventricular fibrillation caused by sudden, blunt, nonpenetrating and innocuous-looking trauma to the anterior chest wall. It usually involves young, predominantly male, athletes and it is one of the leading cause of sudden cardiac death in young athletes, exceeded only by hypertrophic cardiomyopathy and congenital coronary artery abnormalities. This medical entity is mostly described in baseball, however it has also been reported during hockey, softball, lacrosse, karate, and other sports activities in which a relatively hard and compact projectile or bodily contact caused impact to the person's precordium. Early cardiopulmonary resuscitation and rapid defibrillation can significantly decrease the risk of death. Using of adequate chest wall protectors and other safety equipment may prevent appearance of this life-threatening condition.

RECEIVED:
October 1, 2014

LITERATURE

1. Madias C, Maron B, Weinstock J, et al. Commotio cordis - sudden cardiac death with chest wall impact. *J Cardiovasc Electrophysiol*. 2007;18:115-22.
2. Doerer J, Haas T, Estes N, et al. Evaluation of chest barriers for protection against sudden death due to commotio cordis. *Am J Cardiol*. 2007;99:857-9.
3. Maron BJ, Wentzel DC, Zenovich AG, et al. Death in a young athlete due to commotio cordis despite prompt external defibrillation. *Heart Rhytm*. 2005;2:991-3.