

WCC 2018 Abstract Submission

Epidemiology / Prevention / Health Promotion / Physical Activity / Advocacy

WCC2018-ABS-1826

CARDIAC ARRESTS DURING SPORTS: DAE, SURVIVAL AND NEUROLOGICAL OUTCOME.

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I agree with the above statement: Yes

I want my abstract to be consider for: Indifferent (Eposter only or moderated Eposter)

I would like to apply for a Early Career Investigator Award: No

Introduction: Sudden cardiac death (SCA) is the first cause of death in the western world; every year a high number of cases are recorded in apparently healthy patients while they are practicing sports, especially amateur sports, and unfortunately the survival rate is still too low. In Piacenza, the number of defibrillators AEDs placed in the city and province is considerably high, thanks to fundraisers for the purchase of AEDs

Objectives: To evaluate survival and neurological outcome of patients struck by SCA during the practice of sports in centers equipped with a defibrillator (AED) and compare it with the number of cardiac arrests occurred in centres not yet equipped with AEDs

Methods: A retrospective observational study was conducted on all SCA cases recorded during sports activities in the city and province of Piacenza from 1999 to June 2017. The events were divided into two groups according to where they occurred: A - equipped with AED; B - without AED, and it was evaluated: the time from rescue call to shock, survival and neurological outcome

Results: Of 360 sports facilities in the Piacenza area and province, 207 were belonging to group A, 153 to group B; 26 episodes of SCA were recorded during the analysis period, 15/26 in centres belonging to group A, 11/26 in centres belonging to group B. In centres equipped with AEDs, the time of surgery resulted in 3,3 + -1,4 min compared to 78,3 + - 3,2 (P=0,001), and survival (without neurological damage) was 92,8% compared to 9% for group B patients (p<0,001)

Image/graph I:



Image/graph II:



Conclusion: With the spread of AEDs in sports facilities, it was recorded a significantly increased survival in patients struck by cardiac arrest, due the possibility of intervening promptly with an AED while waiting for the arrival of the rescues. The presence of an AED at the sport centres has to be guaranteed, to further increase patients' survival without neurological harms

Disclosure of Interest: None Declared