

ECG as a screening tool for athletes?

By ACSH Staff — April 24, 2013

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The question of whether or not students should be screened using an electrocardiogram to detect cardiac problems before engaging in sports has come up [again](#) [2]. Although the European Society of Cardiology advocates for the use of an ECG, the American Heart Association recommends only taking a history and doing a physical examination without an ECG. However, [two European studies](#) [3] argue that the ECG is worthwhile.

One study conducted at St. George's University of London, examined about 15,000 individuals ages 14 to 35 over five years, using a health questionnaire, an ECG and a consultation with a cardiologist. The most common reported symptoms were chest pain and pre-syncope lightheadedness, muscular weakness, and feeling faint but 96 percent of those individuals presented with a normal ECG. Furthermore, the rate of false positives for ECG screenings is 36 percent. The second study conducted at the University of Rome, involved all Italian teens rather than just those going out for sports teams, and reported a 21 percent rate of pathological ECG.

Dr. Maria Gatto of La Sapienza University of Rome and author of the second study suggests implementing a national program of screening to reduce sudden cardiac deaths among young people. But Dr. Hugo Saner of the University of Bern, Switzerland believes that the high rate of false positives will cause unnecessary anxiety and costs. And Dr. Sidney Smith, a past president of the American Heart Association and the World Heart Federation, cautions that these studies are not generalizable to populations outside of northern Italy, where the prevalence of genetic abnormalities that can lead to death is very high.

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Links

[1] <http://hsdispatch.com/wp-content/uploads/2013/04/ECG.jpg>

[2] <http://www.acsh.org/should-all-young-athletes-get-screened-for-heart-condition/>

[3] <http://www.medpagetoday.com/MeetingCoverage/EuroPRevent/38633>