

Are We Ready to Assess Young Athletes?

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Dear Editor,

Peidro et al¹ have published an interesting viewpoint about the need for a consensus on the pre-participation screening of young athletes. Those authors have reported the differences in the North-American and Italian approaches regarding the assessment of young individuals who want to practice competitive sports. The American Society of Cardiology does not recommend the 12-lead electrocardiography (ECG) for that assessment, because of its high rate of false-positive results, but the sudden death of Italian athletes has been reduced by 89% due to the inclusion of 12-lead ECG in their screening¹.

Those authors admit that, in Brazil, the number of physicians skilled in interpreting athlete's ECG is lower than desired. We would like to know the cause of that statement: Would there be a lack of physicians interested in Sports

Cardiology among us, or wouldn't physicians who practice that specialty be properly skilled?

Among us, Matos et al² have described in details the ECG alterations caused by physical training, which should be differentiated from true abnormalities, including the need for the careful interpretation of isolated QRS voltage criteria for left ventricular hypertrophy.

Echocardiography and treadmill exercise test are not routinely recommended for the screening of athletes. However, Peidro et al¹ have emphasized that the Italian teams use echocardiography as the first step in the screening of competitive athletes, an approach with which we agree, because of the increasing occurrence of sudden death in sports courts and fields. Wouldn't treadmill exercise test be recommended because of the possibility of triggering severe effort-induced ventricular arrhythmias, or even ischemia, although coronary artery disease is not prevalent in that age group?

Sports Medicine in Brazil has evolved to form skilled professionals to properly assess young individuals who pursue a career in sports. However, we agree with those authors that it is time to standardize approaches and to write our own consensus.

Keywords

Athletes; triage; sports, medicine; training; electrocardiography/utilization; Brazil.

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Reply

Dear Editor of the Arquivos Brasileiros de Cardiologia,

We thank the letter to the Editor of the *Arquivos Brasileiros de Cardiologia* regarding our viewpoint entitled "Pre-participation screening of young athletes: isn't it time for a consensus?"

In the letter, the authors report they do not understand exactly what we mean by writing that "in countries such as Brazil, the number of physicians skilled in interpreting athlete's ECG is lower than desired". Then they ask whether, in our

opinion, "would there be a lack of physicians interested in Sports Cardiology among us, or wouldn't physicians who practice that specialty be properly skilled?"

In reality, it is neither one nor the other. In general, cardiologists lack proficiency in interpreting that exam in that particular group of athletes. We believe that Brazilian Exercise and Sports Cardiologists do know how to properly interpret the subtle differences on an athlete's electrocardiogram. However, those professionals are scarce among us as compared with the number of cardiologists who are not used to manage athletes in all their aspects.

Letter to the Editor

A second question of the authors regards the indication of the treadmill exercise test because of its possibility of triggering severe effort-induced ventricular arrhythmias. As practitioners and lovers of the method, we believe that the treadmill exercise test should not be part of the pre-participation screening of all young athletes, but should be indicated in specific cases, as should echocardiography or other more complex exams.

It is worth emphasizing the idea that up-dated scientific education, based on the best available evidence, associated

with individual practice (experience) forms an optimal binomial for the management of our clients. The pre-participation screening of young athletes still has some controversial issues, which we, Latin-American Exercise and Sports Cardiologists, can help clarify¹.

Sincerely,

**Roberto Peidro,
Victor Froelicher
and Ricardo Stein**

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