

## Comments on the Usefulness of Echocardiography in Preparticipation Screening of Competitive Athletes. Response



### Comentarios a la utilidad del ecocardiograma en la revisión preparticipativa de deportistas de competición. Respuesta

#### To the Editor,

We appreciate the interest in our article<sup>1</sup> shown by Dr. Zigor Madaria and agree with him that echocardiography is a sensitive method for the diagnosis of silent heart disease and, specifically, for the identification of the origin of both coronary arteries. However, in contrast to an earlier report,<sup>2</sup> recent studies seem to place greater importance on the need for surgical treatment of anomalous origin of the right coronary artery<sup>3</sup> and on the finding of this entity during autopsies performed in young athletes.<sup>4</sup>

The justification of the added value of the echocardiogram is based on the moderate sensitivity and specificity of the symptoms, clinical signs, and electrocardiogram in the athletic population. We consider that echocardiography would lend greater sensitivity to the potential diagnoses of heart diseases that cause sudden cardiac death in young people<sup>5</sup> and adults,<sup>6</sup> while it would also enable the detection of heart diseases that, although not a motive for exclusion from sports at the time of the diagnosis, would indicate the need for a closer follow-up. There are data on individuals with bicuspid valve,<sup>7</sup> but outcomes under the effect of training are as yet unknown for most heart diseases.

We agree with Dr. Madaria in that the greater diagnostic sensitivity in minor disorders, including “physiological remodeling,” can lead to overdiagnosis or false positives. Even so, we should also point out that the exact boundary between this physiological remodeling and disease is often difficult to establish, and may vary from one individual to another.<sup>8</sup>

Finally, disqualification from participation in athletic activities is a very complex issue, and we agree that we must respect the freedom of each individual. However, we consider it essential that all of the relevant information concerning the risk involved be disseminated and that these findings be conveyed to the athlete and to the sporting bodies responsible for the competition who, together, should decide whether or not the athlete’s participation in sports should be interrupted. Undoubtedly, in the recreational setting, the decision is mainly up to the individual. From the

medical point of view, our obligation should be to provide the most complete and relevant information possible to promote safe participation in sports.

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