Ebstein's anomaly: Anatomo-echocardiographic correlation

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Background: Ebstein’s anomaly is seen as part of a generalized disturbance in the development of the right ventricle and, in some cases, of the left ventricle.

Objective: The aim of this investigation is to demonstrate that in Ebstein’s anomaly (EA) the right ventricle (RV) is affected in its three portions and to make an anatomo-echocardiographic correlation between the anatomic specimens and the equivalent echocardiographic images.

Methods: Thirty hearts with EA were studied. We describe the alterations of each portions of the RV. Fifty adult patients with this anomaly were studied by echocardiography.

Results:

Anatomy: All hearts had atrial situs solitus, 27 had concordant atrioventricular connection and 3 discordant. The degree of tricuspid valve (TV) displacement showed a spectrum from I to III. The inlet of the RV was markedly thin in 27. The trabecular portion had multiples muscular bands in all. The outlet portion was dilated in 20 and stenotic in 5. In 25 atrial septal defects were found.

Echocardiography: All patients had atrial situs solitus, 42 with concordant atrioventricular connection and 8 with discordant. The degree of TV displacement varied from I to III. The inlet of RV was markedly thin in 42. The trabecular portion had muscular bands in 45. The outlet portion was dilated in 31 and stenotic in 11. In 30 atrial septal defects were found. Associated defects included ostium secundum atrial septal defect, perimembranous ventricular septal defect, moderator band in the left ventricle and prolapse of the anterior mitral leaflet.

Conclusion: The EA affects the whole RV and the anatomo-echocardiographic correlation provides an appropriate understanding of echocardiographic images in terms of a precise diagnosis, therapeutic decisions and prognosis.

Biography
Nilda Espinola-Zavaleta has completed her Medical Academy in Warsaw and Postdoctoral studies from National Autonomous University of Mexico. She has published more than 150 papers in reputed journals and has been serving as an Editorial Board Member of repute.

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