Giant Left Atrium Associated With Mitral Valve Prolapse

To the Editor:

I thoroughly enjoyed Hurst’s dissertation on the etiology of a giant left atrium1 and concurred that a giant left atrium seldom results from severe mitral regurgitation due to a nonrheumatic cause such as mitral valve prolapse. Although I would never dare to challenge Dr Hurst on anything he said or wrote, because I consider him not only as the master clinician of the century but also as my mentor, I thought it might be of interest to point out that there were 2 cases reported in the literature of a giant left atrium associated with mitral valve prolapse.2,3 The presentation in both cases was the Ortner syndrome.

Ortner4 in 1897 described 2 patients with mitral stenosis and hoarseness of voice. Although he attributed the hoarseness to paralysis of the left vocal cord due to compression of the left recurrent laryngeal nerve between the enlarged left atrium and the arch of the aorta, his explanation has been questioned by subsequent workers. According to a literature review, Sengupta et al5 concluded that the etiology of left recurrent laryngeal nerve paralysis was compression of the nerve between the enlarged tense left pulmonary artery and the aorta at the ligamentum arteriosum. That is the reason why Ortner syndrome may also occur in primary pulmonary hypertension, Eisenmenger syndrome due to atrial septal defect where the left atrium is not enlarged, and even aortic aneurysms with encroachment of aorticopulmonary window and resultant compression of the left recurrent laryngeal nerve.5

Finally, I wish to echo Hurst’s teaching that a giant left atrium is more commonly associated with mitral regurgitation than mitral stenosis and rheumatic than nonrheumatic cause of mitral regurgitation. However, like everything in medicine, there may always be exceptions. That is the reason why rare cases of a giant left atrium due to nonrheumatic etiology became the subject of case reports in the medical literature.2,3

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Response

I thank Dr Cheng for his nice comments.

Now to defend my belief that a giant left atrium is produced solely by rheumatic mitral valve disease with predominate severe mitral regurgitation.

In my article,1 I defined the word “giant” as follows: the left atrium must touch the right chest wall in the posteroanterior x-ray film of the chest. I pointed out that it is caused by rheumatic heart disease with predominate severe mitral valve regurgitation. I did not discuss a large left atrium, which does not touch the right chest wall and can be caused by mitral regurgitation due to many causes, including mitral valve prolapse. Also, I did not address the cause of hoarseness.

I have reviewed the articles by Kishan et al2 and Brownsberger et al3 cited in Dr Cheng’s letter. Kishan et al2 used the word giant to describe the large left atrium in a patient with mitral valve prolapse. But, as shown in Figures 1 and 3 of their article, the left atrium does not touch the right chest wall in the x-ray film of the chest or in the photograph of the contrast computed tomogram. They simply are dealing with a large left atrium rather than a giant left atrium.

The article by Brownsberger et al3 cited in Dr Cheng’s letter did not present an x-ray film of the chest. They simply stated that the “left atrium was markedly enlarged.” They diagnosed mitral valve prolapse but presented no data to indicate that a giant left atrium was present.

For now, I will “stick to my guns.” It would be rare indeed to observe a giant left atrium caused by any disease other than severe rheumatic mitral valve regurgitation with or without some degree of stenosis.

Our differences are resolved when the definition of giant is adhered to.

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