A 75-year-old woman was admitted to the emergency room because of increasing edema. She had previously been diagnosed with rheumatic mitral disease, which required surgery with implantation of a mechanical prosthesis in 2001. At that time, pulmonary hypertension was present, and during the follow-up, she developed severe tricuspid regurgitation. A single-chamber ventricular pacemaker was implanted in 2006 because of complete atrioventricular block. The patient was in New York Heart Association class IV.

The emergency room physician ordered a chest x-ray (Figure A), which showed a giant cardiac silhouette. Both atria were increased in size. A pacemaker lead could be seen in the right chambers, as well as a mechanical prosthesis in the mitral position. A right pleural effusion was suspected, and a CT scan was done (Figure B). The CT scan showed scarce right and left pleural effusion. The right and left atria were dilated, with an estimated volume of 5.6 mL. The computed tomography scan demonstrated that the giant atria mimicked a right pleural effusion on the chest x-ray.

Extreme atrial dilatation has been described extensively in the past but is now infrequent in developed countries. The decreasing incidence of rheumatic fever and the availability of surgery have contributed to making the images like those we present here a rarity.

Disclosures
None.

References

Figure. A, Chest x-ray showing a giant cardiac silhouette. Atria are enlarged. A mechanical prosthesis can be seen in the mitral position, and a pacemaker defines the shape of the right atrium. B, Computed tomography scan. Both atria are >5.500 mL.
Extreme Right and Left Atrial Enlargement in a Patient With Rheumatic Valvular Disease
and Mitral Mechanical Prosthesis
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