Hypertrophied Moderator Band in Pulmonary Sarcoidosis

TO THE EDITOR: Moderator band hypertrophy has been described in a case of right ventricular hypertrophy secondary to an atrial septal defect (1).

The following describes a patient in whom moderator band hypertrophy occurred as a result of pulmonary hypertension due to chronic pulmonary sarcoidosis.

A 34-yr-old man was admitted to the hospital because of progressive dyspnea. He was known to have pulmonary sarcoidosis since age 21, when an open lung biopsy revealed chronic granulomatous disease. He had numerous hospital admissions due to respiratory problems as a result of the sarcoidosis. His current admission was initiated because of progressive dyspnea at rest associated with an intractable cough.

A chest x-ray at the time of admission revealed diffuse extensive interstitial disease bilaterally, as well as prominent hila, representing either adenopathy or enlarged pulmonary arteries (Fig. 1). A resting thallium scan (Fig. 2) demonstrated marked right ventricular hypertrophy with visualization of the moderator band, that appeared to be hypertrophied. The patient was treated with high-dose i.v. steroids and was then transferred to another hospital for combined heart and lung transplantation, but he expired prior to surgery.



FIGURE 1 AP view of chest demonstrating cardiomegaly, prominent hila, and extensive diffuse interstitial process bilaterally



FIGURE 2

Resting ²⁰¹TI myocardial images both immediate (left) and delayed (right), demonstrating right ventricular hypertrophy (arrow), as well as hypertrophied moderator band (arrowhead)

The moderator band is muscular tissue within the right ventricle that divides it into an inferior/posterior compartment and an anterior/superior compartment and is believed to prevent the ventricle from overdistending during systole (2).

References

- 1. Sullivan K, Park CH: Hypertrophied moderator band in atrial septal defect. *Clin Nucl Med* 9:458, 1984
- 2. Gray H, Goss C: Anatomy of the Human Body, Philadelphia, Philadelphia Running Press, 1968, p 554

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