Images in Clinical Tropical Medicine

Pericardial Tuberculosis

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Abstract. A 53-year-old malnourished man, presented to the emergency room with 2 months of poor appetite, malaise, high spiking fevers, 10 Kg weight loss and night sweats; he also noted progressive exertional dyspnea and anterior chest pain developing over the last 2 days. On physical examination he was afebrile, had 90/60 arterial pressure, 100 × min heart rate, pulsus paradoxus, jugular vein engorgement, sudden inspiratory splitting of the second heart sound, and soft heart sounds on auscultation. A contrasted tomography of the thorax showed a large pericardial effusion with pericardial contrast enhancing and no pulmonary opacities. Histologic examination of pericardial tissue showed multinucleated giant cells with scarce acid-fast bacillae, and on pericardial culture grew *Mycobacterium tuberculosis*.

A 53-year-old malnourished man with no significant past medical history had worked his entire life as a farmer in rural Colombia. He went to a local emergency room because of 2 months of poor appetite, malaise, high spiking fevers, 10 Kg weight loss, and night sweats. He also had progressive exer-

FIGURE 1. Coronal view of thorax CT showing a large amount of pericardial effusion with pericardium contrast enhancing.

FIGURE 2. Axial view of thorax CT showing a large amount of pericardial effusion with pericardium contrast enhancing.

tional dyspnea and anterior chest pain for 2 days. On physical examination he was afebrile, arterial pressure 90/60, and heart rate 100/min. A pulsus paradoxus, jugular vein engorgement, soft heart sounds, and sudden inspiratory splitting of the second heart sound were found. A computed tomographic scan of

FIGURE 3. Transthoracic echocardiographic image of the heart showing a large pericardial effusion.

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FIGURE 4. Transthoracic echocardiography showing the surface of the heart with a shaggy appearance, with frond-like structures extending to the parietal pericardium.

FIGURE 5. Histologic examination of pericardial tissue showing granulomas with multinucleated giant cells.

FIGURE 6. Ziehl-Neelsen stain showing scarce acid-fast bacillae.

the thorax showed a large pericardial effusion with pericardium contrast enhancing but no pulmonary opacities (Figures 1 and 2). A transthoracic echocardiography confirmed pericardial tamponade (Figures 3 and 4) that led to pericardiocentesis, which yielded 2,200 mL of reddish liquid with 5.9 gm/dL total protein; 2,300 leukocytes/mL (70% Lymphocytes); glucose 2 mg/dL; and an adenosine deaminase level of 234 U/L. Histologic examination of pericardial tissue showed granulomas with multinucleated giant cells (Figure 5) and scarce acid-fast bacillae (Figure 6); culture of pericardium grew *Mycobacterium tuberculosis*. A test for human immunodeficiency virus was negative. He was started on four antituberculosis medications plus Prednisone, and discharged 2 weeks after admission. Unfortunately, 2 months later he was readmitted because of constrictive pericarditis, and a pericardiectomy was performed. After 6 months of anti-TB therapy, the patient remained well.

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