Case Report

Transient Lymphadenopathy Secondary to Nephrotic Syndrome

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A 57-year-old man with systemic scleroderma and occupational silica exposure presented a two-month history of progressive dyspnea and peripheral edema. Physical examination revealed anasarca, pulmonary bibasilar crackles and hypoxemia (SatO2 80%).

Contrasted high-resolution computed tomography scan (HRCT) of the chest revealed enlarged mediastinal lymph nodes and mediastinal fat associated to bilateral diffuse ground-glass infiltrates and interlobular septal thickening with predominance in the superior lobes, without arterial thrombi. The echocardiogram was unremarkable, and renal biopsy was diagnostic of nephrotic syndrome secondary to focal segmental glomerulosclerosis.

After prednisone and treatment with diuretics, the edema and dyspnea significantly improved. HRCT performed two months later showed resolution of the signs of pulmonary congestion and involution of mediastinal lymph node and fat enlargement (Figure 1).

Mediastinal lymphadenomegaly secondary to hypervolemia is an underdiagnosed tomographic finding. Herein we describe, in a patient with normal cardiac function, findings of pulmonary congestion associated to lymph node enlargement. The nephrotic syndrome causing hypoalbuminemia, low plasma colloid osmotic pressure and augmented transcapillary fluid leakage was the probable cause of the radiological findings.

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Mediastinal lymphadenomegaly secondary to hypervolemia is an underdiagnosed tomographic finding1-9. Its incidence may arise in 55% of patients with symptomatic congestive heart failure1. They are usually located in the pretracheal area and have < 2 cm in short axis diameter10. Differential diagnosis to this case would include malignancies, lymphoma and sarcoidosis.

In this study, we describe a patient with normal cardiac function, findings of pulmonary congestion associated to lymph node enlargement. The nephrotic syndrome causing hypoalbuminemia, low plasma colloid osmotic pressure and augmented transcapillary fluid leakage was the probable cause of the radiological findings. To our surprise, even lymph nodes with peripheral calcification can enlarge due to edema. The rapid improvement after treatment, together with resolution of parenchymal findings of congestion, leads us to the diagnosis without an invasive procedure.

Potential Conflict of Interest
No potential conflict of interest relevant to this article was reported.

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Study Association
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Figure 1 - Chest HRCT revealing bilateral diffuse ground-glass infiltrate with superior lobes predominance, interlobular septal thickening (black arrowheads) and small pleural effusion bilaterally, without arterial trombi. Enlarged lymph nodes are noticed in the paraaortic, paratracheal and subcarinal regions, some with peripheral calcification (white arrows). On the right: Chest HRCT performed two months later shows resolution of ground glass opacities and septal thickening, and involution of mediastinal lymphadenomegaly (white arrows) and mediastinal fat (black arrows). The nephrotic syndrome causing hypoalbuminemia, low plasma colloid osmotic pressure and augmented transcapillary fluid leakage was the probable cause of the radiological findings.

References


