Pulmonary graft-versus-host disease

A 15 year-old boy was submitted to bone marrow transplant (BMT) from his HLA identical sibling for acute lymphobalstic leukemia (ALL) in second complete remission. Nine months later, during cyclosporine tapering, he developed dyspnea, cough, wheezing, mild hypoxemia and severe obstructive functional impairment. High resolution lung computed tomography led to the diagnosis of bronchiolitis obliterans (Figures 1A, 1B). The clinical picture resolved completely after 15 days of methylprednisolone 0.5 mg/kg (Figure 2A and 2B). Bronchiolitis obliterans is a late complication affecting 5-20% of allogeneic BMT recipients and, like idiopathic pneumonia and non-specific interstitial pneumonitis, may be considered part of chronic graft-versus-host disease syndrome.

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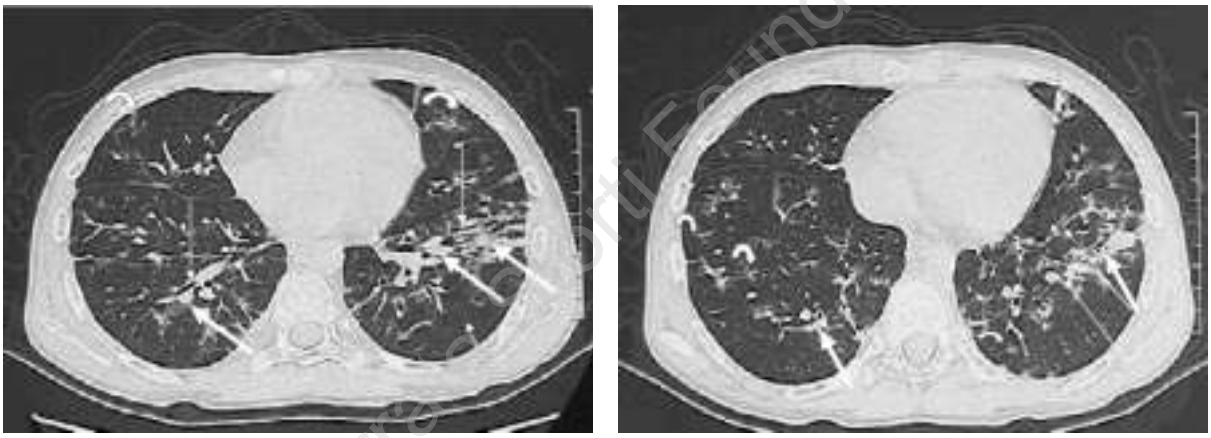

Figure 1A and 1B (before steroid treatment). Bilateral peribronchial infiltrations associated with thickening of the bronchial walls (large white arrows), areas of hyperinflation (short white arrow), small bronchiectasis (thin white arrows) and peripheral nodular opacities (curved white arrows).

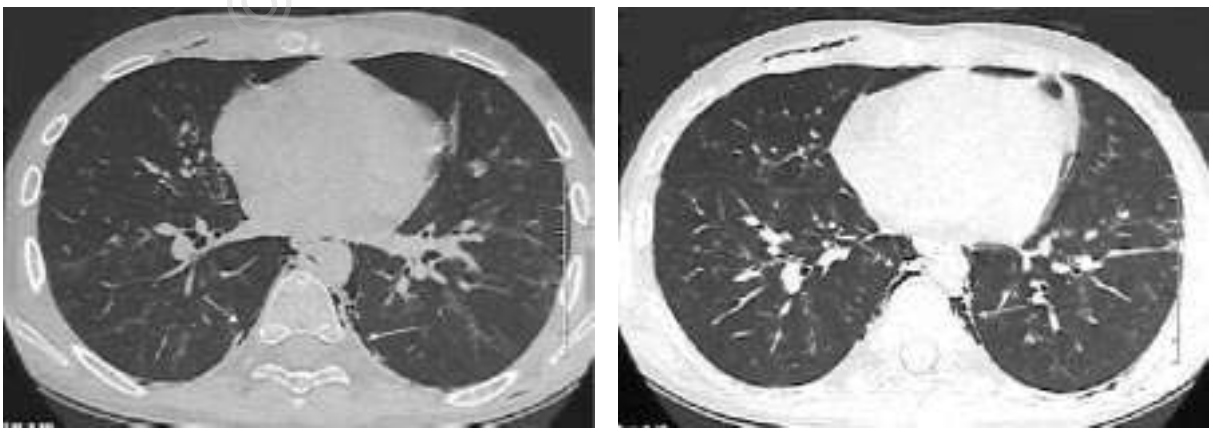

Figure 2A and 2B (15 days later, after steroid treatment). Reduction of the peribronchial infiltration. No evidence of peripheral nodular opacities. Pneumomediastinum (short white arrows).