Long-Term Outcome of Oncologic Right Pulmonary Artery Occlusion

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A 53-year-old female presented chronic dry cough and mild dyspnea, for 6 months. Due to an erroneous interpretation of CT findings (Figure 1A), she was diagnosed as pulmonary embolism, but without improvement with 6 months of anticoagulation. Evaluated at our service with progressive dyspnea, CTPA demonstrated complete occlusion of the right pulmonary artery (Figure 1A and Figure 1B). At echo, initial systolic...
Figure 1: Oncologic Right Pulmonary Artery Occlusion.
pulmonary artery pressure 30 mmHg, not suggestive of pulmonary hypertension. A biopsy of the right pulmonary artery demonstrated the presence of choriocarcinoma. Chemotherapy was initiated with bleomycin, etoposide, cisplatin and, finally, dactinomycin. After treatment, patient remained asymptomatic, beta-HCG decreased from 198.374 mU/ml to 1.8 mU/ml. After a 5-year follow-up, neither return of the disease (Figure 1C), nor signs of pulmonary hypertension were characterized (normal echo and BNP), despite the vascular perfusion defect of the right lung on V/Q scan (Figure 1D). Pulmonary hypertension occurs when more than 60% of the lung vascular bed is impaired [1]. In this case, despite the sequel on right pulmonary artery at long-term, micro-vasculature is preserved. Therefore, right pulmonary artery occlusion is not enough, *per se*, to induce pulmonary hypertension. Up to this date, the patient is fine without specific pulmonary hypertension therapy and remains at clinical follow-up.

**Author’s Contribution**

All authors equally contributed to data acquisition, patient follow-up and manuscript writing.

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**References**