Left pulmonary artery ligation

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A 10-month-old boy presented with recurrent respiratory infections since he was 2 months old. He was born prematurely, and an open thoracotomy closure of patent ductus arteriosus was performed in the first month of life. Bronchiolitis obliterans and bronchopulmonary dysplasia were suspected at that time. Since he came from another hospital, no imaging studies were available. Chest radiograph

Fig. 1 Chest radiograph

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at 10 months old shows a hyperlucent left hemithorax and signs of previous thoracotomy (Fig. 1). CT shows a poorly vascularized left lung, a patent ductus arteriosus and ligation of the left pulmonary artery (Fig. 2). Surgical correction was ineffective because the left pulmonary artery was no longer viable.

Inadvertent ligation of the pulmonary artery is a rare complication of surgical closure of patent ductus arteriosus [1]. Jaffe et al. [2] reported five patients, diagnosed 1 day to 5 years after surgical procedure. Asymmetrical pulmonary blood flow should raise suspicion of this rare complication in the proper clinical setting. Prompt recognition is important for surgical repair to be feasible.

Fig. 2 Chest CT

References

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