

Right to left intra-cardiac shunt with low right heart pressures

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A 79 years old female was admitted to hospital due to dyspnea, fever and severe hypoxemic respiratory failure. CTPA was done to exclude the diagnosis of pulmonary embolism (Fig. 1). Platypnea-orthodeoxia was noticed on the physical examination, while the administration of 100% FiO_2 did not considerably influence the low PO_2 levels.

The lung ultrasound was normal (Fig. 2) while transthoracic echocardiography also showed normal findings and no clues of pulmonary hypertension. Imaging studies of the abdomen did not denote any arterio-venous malformations. Right heart catheterization was performed demonstrating a 16% right to left shunt despite normal right heart pressures. Transesophageal echocardiography and bubble test (Fig. 3 and 4) revealed a patent foramen ovale with significant right to left blood flow. A diagnosis of low pressure right to left intracardiac shunt was made. A percutaneous umbrella was placed successfully to close the defect (Fig. 5).

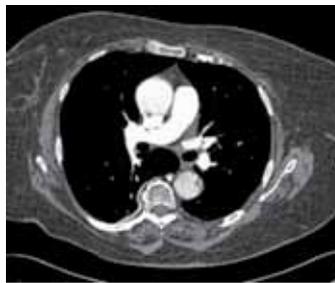


FIGURE 1.



FIGURE 2.



FIGURE 3.



FIGURE 4.

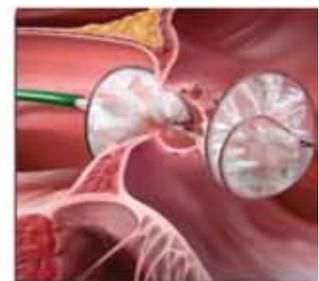


FIGURE 5.

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