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Inverted left atrial appendage during acute aortic dissection repair

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Abstract

Inverted Left Atrial Appendage (LAA) is an uncommon event in cardiovascular surgery. The findings on echocardiography are sometimes misled into thrombus or tumor. We experienced a case with inverted LAA during total aortic arch repair for acute aortic dissection.

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Case description

A 55-year-old man was diagnosed as Stanford type A acute aortic dissection by computed tomography. Total aortic arch repair with frozen elephant trunk was performed. During de-airing by vent tube at the aortic root and right upper pulmonary vein, Transeesophageal Echocardiography (TEE) showed a high-echoic and mobile mass in the Left Atrial Appendage (LAA). Initially, the mass was diagnosed as a huge and mobile thrombus. However, the expert cardiologist carefully examined and diagnosed the tumor as inverted LAA. The points were as follows; scraggy surface, no feeding vessels around the tumor, and absence of LAA between the left superior pulmonary vein and mitral valve. After reloading the volume to the heart and pulling out the LAA, the LAA returned to the original position. Inverted LAA may be caused by excess negative pressure such as left atrial vent [1] or by external pressure due to high CPAP [2]. Although we were able to return the LAA to its original position after reloading the volume, other methods would be by Valsalva maneuver or digital manipulation [3]. Since misdiagnosis of inverted LAA should lead to an unnecessary second cross-clamp, it is important to know that inverted LAA can infrequently be caused by negative pressure with left heart venting during cardiovascular surgery.

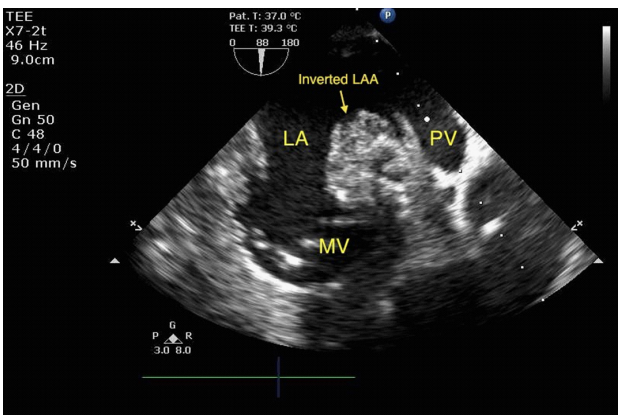

Figure 1: Clinical image.

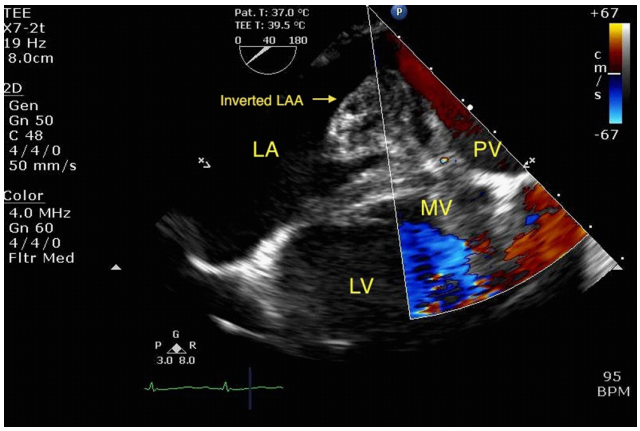

Figure 2: Clinical image.

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References

1. Fujiwara K, Naito Y, Noguchi Y, Hayashi H, Uemura S. Inverted left atrial appendage: An unusual complication in cardiac surgery. Ann Thorac Surg. 1999; 67: 1492-1493.
2. Miyata K, Shigematsu K. Inverted Left Atrial Appendage during Minimally invasive Mitral Valve Repair. Ann Card Anaesth. 2018; 21(2): 192-194.
3. Chikwe J, Fisher GW, Adams DH. Inverted left atrial appendage. J Am Coll Cardiol. 2009; 54(17): e7.