

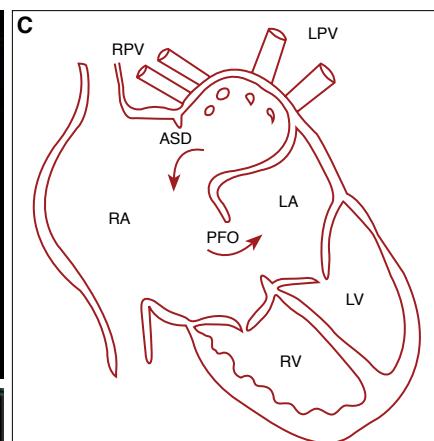
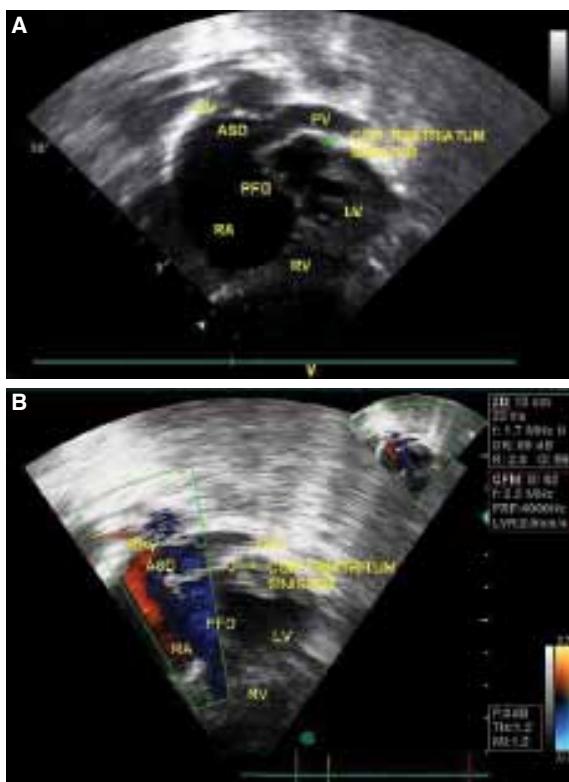
## Cor triatriatum sinister with non-fenestration in a seven-month-old patient

*Yedi aylık bir hastada fenestrasyonsuz kor triatriatum sinister*

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Cor triatriatum sinister is defined as a fibromuscular membrane that divides the left atrium (LA) into two chambers. The proximal chamber is located in the posterior-superior part of the LA, and the distal chamber is located in the anterior-inferior part of the LA. A relationship between the two sections is provided by one or more windows. Cor triatriatum sinister with non-fenestration is an extremely rare anomaly and causes an obstruction on the left side of the heart. A seven-month-old girl with heart murmur and cardiomegaly on chest radiograph was referred to our clinic. The physical examination revealed tachypnea, tachycardia with a heart rate of 150/min, and mild cyanosis (oxygen saturation was 85% from a finger). Echocardiographic examination showed a fibromuscular membrane without fenestration, dividing the LA into two cavities, with the proximal cavity receiving the pulmonary venous flow and the distal cavity being the true LA. There was no connection between the proximal

and distal chambers throughout cor triatriatum sinister. The proximal chamber opened to the right atrium via large high venous atrial septal defect (ASD), and the distal chamber also opened to the right atrium via a patent foramen ovale with a right-to-left shunt due to supra-systemic right-sided pressures (Figs. A, B; Videos 1, 2\*). Cardiac catheterization was performed in order to better visualize cor triatriatum sinister. On imaging of non-ionic contrast medium given into the pulmonary arteries, the right and left pulmonary veins were seen to drain into the proximal chamber located above cor triatriatum sinister and opened to the right atrium through large high venous ASD (Fig. C, Video 3A, B\*). The distal chamber was seen to open to the right atrium, and contrast medium was seen to pass to the distal chamber through a patent foramen ovale with right-to-left shunt. The case was referred to cardiovascular surgery. Complete corrective surgery was performed. Exploration revealed cor triatriatum sinister with non-fenestration and large high venous ASD, and the thick fibromuscular membrane was resected. The patient died of respiratory failure on the second postoperative day.



**Figures– (A, B)** Apical four-chamber view on echocardiography showing a fibromuscular membrane without fenestration, dividing the LA into two cavities, with the proximal cavity receiving the pulmonary venous flow and the distal cavity being the true LA. **(C)** Apical four-chamber view demonstrating a schematized picture of cor triatriatum sinister. \*Supplementary video files associated with this presentation can be found in the online version of the journal.