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Images in Congenital Heart Disease

Symptomatic divided right atrium in a newborn

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A TWO-DAY-OLD TERM BABY BOY PRESENTED TO his local hospital with problems with feeding and cyanosis. Because arterial saturations of oxygen measured transcutaneously were 85%, and did not improve subsequent to supplementation with oxygen, he was transferred to our neonatal intensive care unit. Apart from central cyanosis, the physical examination, chest radiograph, and blood tests were all normal.

Echocardiography (Fig. 1) showed a partition dividing the right atrium that was attached to the interatrial septum, and adjacent to the orifice of the inferior caval vein. With colour Doppler (Fig. 2), obstruction to flow was demonstrated across the tricuspid valve, with a mean gradient of 5 millimetres of mercury, and right-to-left shunting across the interatrial septum was confirmed.

Because of the obstruction to flow through the tricuspid valve, with ensuing cyanosis, on the ninth day of life the partition was resected, and the interatrial septum was closed at open heart surgery. During the operation, the surgeon noted a perforation of 2.7 millimetres in the fibrous shelf. Recovery was uneventful.

Divided right atrium, or cor triatriatum dexter, is a rare congenital abnormality in which the right valve of the systemic venous sinus fails to regress, and instead partitions the chamber into upstream and downstream compartments. The partition typically runs between the interatrial septum and the mouth of the inferior caval vein. In our patient, we opted to excise the shelf surgically, this approach permitting simultaneous closure of the atrial septal defect, and being achievable with minimal morbidity and mortality.[1]

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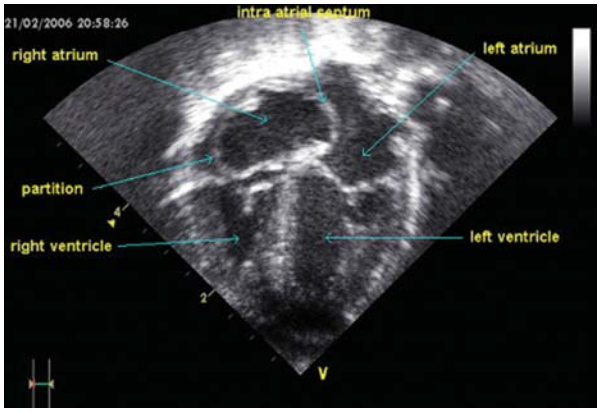

Figure 1.

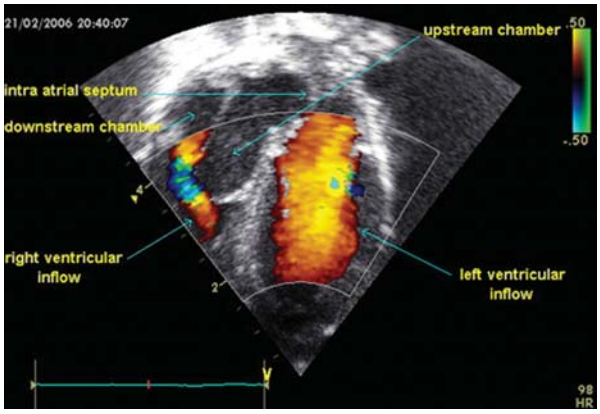

Figure 2.

Reference

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