

A Case of Neonatal Cardiac Tamponade Associated with Benign Hemangioma

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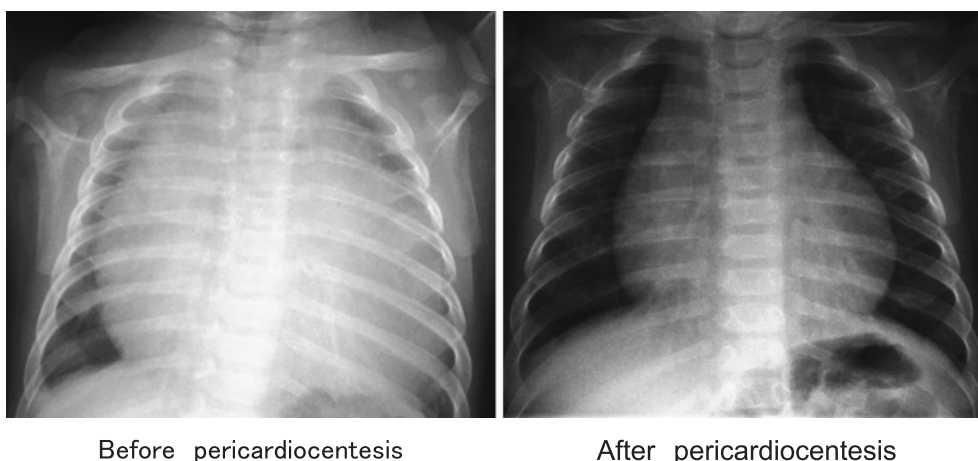


Fig. 1

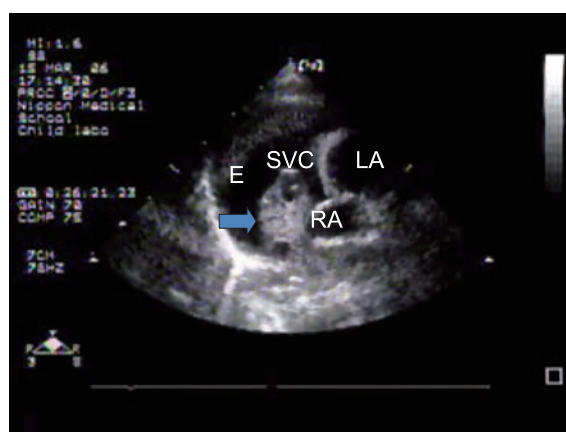


Fig. 2

Fetal echocardiography in the 32nd week of gestation showed cardiac tumor and pericardial effusion. The pericardial effusion gradually increased, and cardiac function was impaired by cardiac tamponade. Cardiotocography showed fetal distress. Emergent cesarean section was performed. Cardiac tamponade resulted in respiratory failure after birth. Artificial ventilation and pericardiocentesis were needed. After 100 mL of effusion was drained, the respiratory state improved. Subsequent echocardiography revealed that the pericardial effusion had accumulated repeatedly. Drainage was needed at 1-week intervals. The large amount of effusion was believed to have caused by the tumor. Resection of the tumor was indicated as a radical treatment, but complete resection was impossible because magnetic resonance imaging revealed that the tumor involved the sinus node. Instead, we performed surgery to create a pleuropericardial window. After the operation, the patient was free of cardiac tamponade. Histological examination showed benign hemangioma.

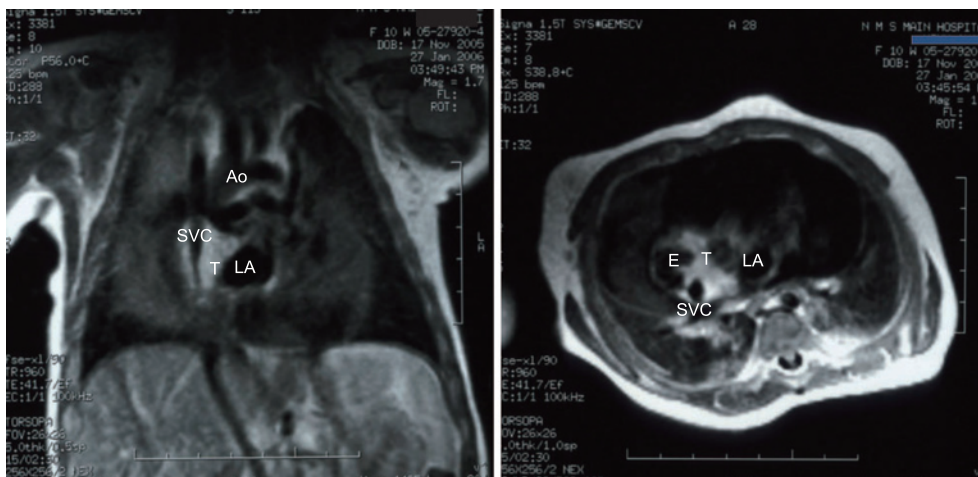


Fig. 3

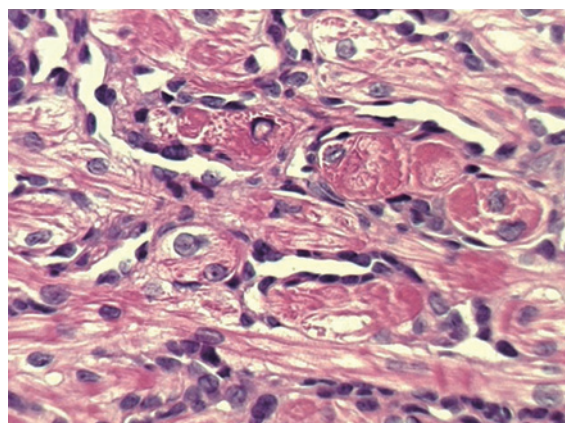


Fig. 4

Fig. 1 Chest XP

Fig. 2 TTE

Echocardiography showed the solid tumor (**arrow**) and pericardial effusion.

E=pericardial effusion; SVC= superior vena cava; RA=right atrium; LA= left atrium;

Fig. 3 MRI

Coronal and Axial image through the heart, using T1-weighted magnetic resonance imaging, shows tumor involving right atrium and superior vena cava and compressed SVC. The tumor is homogeneously high intense on T1-weighted imaging. The size of the tumor was $2.2 \times 2.0 \times 2.0$ (cm)

E=pericardial effusion; SVC= superior vena cava; RA=right atrium; LA= left atrium;

T=tumor; Ao=Aorta

Fig. 4 Histology of hemangioma

Increased capillaries are lined by a flattened endothelium.

The vessels are separated by scant connective tissue.

Pathological diagnosis showed no malignancy.