fetoprotein from the fetal compartment into the maternal compartment. Placental bleeding, regardless of location, is associated with elevated MSAFP; thus, elevated MSAFP is a nonspecific marker for placental dysfunction. In the recurrent episode reported here, MSAFP was elevated more than 11-fold over normal.

In general, Breus' mole is thought to occur randomly and without warning. They are not typically familial and not thought to recur. Breus' mole pregnancies have not been thought to recur, but this patient experienced two consecutive such pregnancies. Either our patient was extremely unlucky and had a rare random event occur twice, or may have some undefined genetic predisposition, or a suboptimal uterus-trophoblast interface, or an underlying serum or endothelial abnormality that predisposed her to develop this serious perinatal condition.

Management options for massive subchorionic thrombohematomas are limited. Not all of the cases end badly: In some reports, adequate fetal growth was maintained and outcome was favorable.[4] A finding of a large heterogeneous nonvascular collection on the fetal surface of the placenta should be followed closely. High MSAFP, oligohydramnios, early fetal growth restriction, and abnormal umbilical Doppler velocimetry are associated with very poor outcome, and no interventions are available that benefit the pregnancy.[3]

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## Coronary Artery Fistula in Down Syndrome: A Hidden Association

A female infant with Down syndrome was born at 37 weeks' gestation in good condition and discharged asymptomatic on the third day. Prenatal echocardiography at 22 weeks' gestation suggested a diagnosis of sinus venous atrial septal defect and atrial septal aneurysm. Cardiological examination at 1 week of life revealed a Levine 2/6 continuous murmur, normal blood pressure, pulses, oxygen saturation; and an electrocardiogram (ECG) revealed no ST-segment changes or chamber hypertrophy. Echocardiography showed an atrial septal aneurysm, a large subaortic ventricular septal defect, moderate tricuspid regurgitation, but also a coronary artery fistula (CAF) originating from an aneurysmal 3.8-mm-dilated left main coronary artery (Figure 1). The CAF appeared as a large 2.2-mm tortuous vessel (Figure 2) coursing posteriorly between the atria and draining adjacent to the superior vena cava (Ogden's classification II).[1]

At 2 months, diuretic therapy was necessary, and at 5 months the ventricular septal defect was surgically closed. Follow-up for early detection of potential CAF complications was performed. At 12 months the patient is well-grown and asymptomatic. The ECG and echocardiographic monitoring show no significant signs of heart failure or myocardial ischemia.

Coronary artery fistulas are rare anomalies (0.4% of congenital heart defects) characterized by

**Figure 1.** Two-dimensional echocardiography short-axis view shows the dilated left coronary artery as wide as 3.8 mm (*z* score 8.3). AO, aortic root; LCA, left coronary artery.

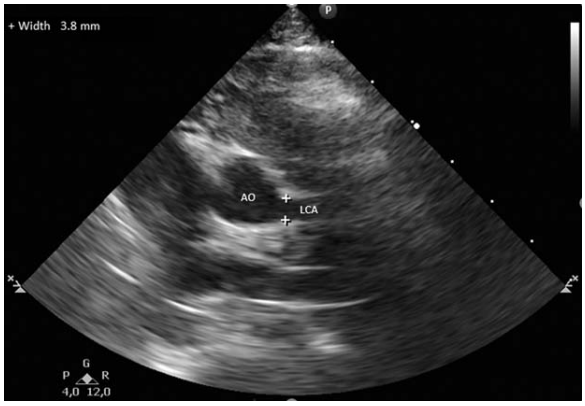
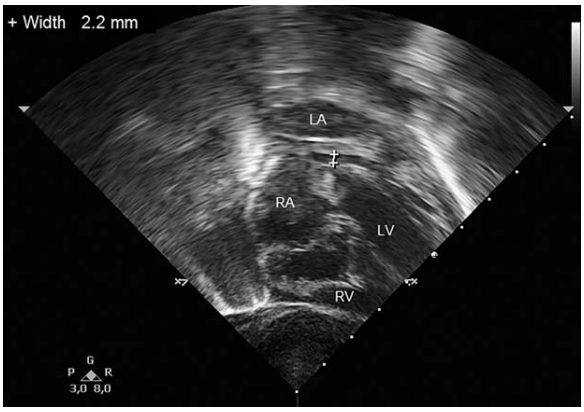


**Figure 2.** Subcostal four-chamber view shows a left coronary artery fistula, 2.2 mm wide, that originates from the left main coronary artery and runs posteriorly between the atria. LA, left atrium; LV, left ventricle; RA, right atrium; RV, right ventricle.




communication of coronary artery with cardiac chambers or with the systemic or pulmonary circulation, bypassing the myocardial capillary network.[1] Few cases of CAF have been reported in patients with Down syndrome.[2] Nevertheless, angiogenesis perturbation is known.[3] Echocardiography has a high accuracy in detecting the origin, size, and course of CAF, whereas prenatal diagnosis is more difficult.[4] Therefore, whenever unexpected unusual cardiac flow signal is observed, it is mandatory to differentiate between CAF and other causes of myocardial ischemia or heart failure.[1]

Small CAFs are generally asymptomatic and may undergo spontaneous regression; nevertheless, strict follow-up of patients with medium-large CAF or small CAF with associated dilated proximal arteries is required to address options and timing of treatment.

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