Sacrococcygeal teratoma

During a routine second-trimester scan a major abnormality was noted. A large, complex mass measuring [provide the actual measurement] was arising and protruding from the fetal sacrococcygeal area. The mass contained both solid and cystic components, sparse calcifications, and, using color Doppler, demonstrated vascular flow within it. No intrapelvic involvement was clearly identified, but the assessment was difficult due to bowel echogenicity. No signs of anemia were noted; PSV of MCA was XXX MoM. There was no hydrops or polyhydramnios at this stage. This was a female fetus with an estimated fetal weight of XXX grams, plotted on the XXX centile, and no other defects were noted. Specifically, the head, brain, and spine appeared as expected. The external genitalia were normally developed, and, although with difficulty, the perianal muscular complex (target sign) was demonstrated.

The findings were consistent with the diagnosis of a sacrococcygeal teratoma. We explained to the parents that the majority of sacrococcygeal teratomas occur sporadically and no additional genetic testing was recommended. After a thorough discussion about the nature of the disorder, implications for the pregnancy, and long-term outcomes, the option of termination of pregnancy (TOP) was also discussed. The parents were understandably upset and needed more time to make a decision.

In continuing pregnancies, serial sonograms and Doppler ultrasonography are indicated to follow up on the growth and vascularization of the tumor. Additionally, fetal echocardiography would be done to assess the potential high-output cardiac failure that can develop in some cases. Consultation with a neonatologist and a pediatric surgeon will be arranged for further prenatal counseling. Delivery should take place in a tertiary referral center to provide adequate neonatal management. Large sacrococcygeal tumors may cause severe soft tissue dystocia. A cesarean section will likely be needed given the size and the type of sacrococcygeal teratoma.

At birth, a multidisciplinary team will be needed for both the assessment and management of the newborn. A good outcome can be expected for small, cystic, avascular lesions that are externally located. Relevant poor prognostic factors include the development of fetal hydrops, associated with significant solid and vascular components; malignancy, which almost invariably implies fatal outcomes; and size, which does not seem to predict malignancy but is important due to the greater surgical risk associated with very large lesions. Unfortunately, the perinatal mortality rate can reach 30 to 40%.

The risk of recurrence is low. In any case, a targeted early anatomical assessment is suggested in future pregnancies for parental reassurance.