A case of sacrococcygeal teratoma

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Objective

Sacrococcygeal teratoma (SCT), is the most frequent congenital germ cell tumor in the fetus and the incidence is one in 35, 000 to 40, 000 live births. As most SCTs present as solid or cystic masses in the caudal area, their prenatal diagnosis is straight-forward. Most cases are diagnosed during the second and third trimester and females are four times more likely to be affected than males. However, especially with the advance of the first trimester screening for chromosomal abnormalities by nuchal translucency measurement, more SCTs are now being detected in the first trimester. These tumors can cause various prenatal complications such as rupture of the tumor or high-output cardiac failure resulting in fetal hydrops.

Methods

We present a case referred to our perinatology clinic for a mass consisting of cystic and solid areas at the sacrococcygeal region of the fetus at 19 week of gestation.

Results

A 17-year-old primigravid woman was referred to our clinic for a sacrococcygeal mass at 19 week of gestation. According to her past history, amniocentesis was conducted for the high risk of Down syndrome in the second trimester screening test and the karyotype analysis revealed as 46XX. Ultrasonographic evaluation showed a tumor containing solid and cystic areas at the sacrococygeal site of the fetus 29×36 mm in diameter (Figure 1). There were no any other anomalies. Two days after the initial examination intrauterine death was determined when the patient again admitted for vaginal bleeding, so the pregnancy was terminated. Postmortem examination confirmed the presence of an exophytic presacral mass (Figure 2) and hystopathological examination confirmed the diagnosis of immature sacrococcygeal teratoma.

Conclusion

Sacrococcygeal teratoma is the most common and generally benign tumor in infants. The prompt prenatal diagnosis of sacrococcygeal teratoma, as well as the detection of possible associated anomalies, is important for the pregnancy management, prediction of possible complications and choice of appropriate treatment. The overall survival of antenatally diagnosed SCT is approximately 77% but when hydrops and other complications requiring in utero intervention develops, it carries a poor prognosis. Negative prognostic factors for SCT include solid tumors, those detected early in pregnancy, malignant histotypes, polyhydramnios, placentomegaly, and fetal hydrops. Urologic and anorectal complications are common in patients with SCT such as neurogenic bladder, vesicoureteral reflux, urinary incontinence and obstruction of the bowel or bladder and collecting system. Ultrasonography and MRI are shown to be noninvasive, compatible and complementary diagnostic modalities in evaluation of sacrococcygeal teratoma in prenatal period. It is important for clinicians to know how to manage such cases of SCT considering the possible complications in the prenatal and the postnatal period.