

Sacroccygeal Teratoma (SCT)

What is a sacroccygeal teratoma (SCT)?

SCT is a tumor made up of tissues from the three primary layers of cells defined in embryos, or germ layers.

SCT appear in the lower back and buttocks.

The tumors can grow at an unpredictable rate to very large dimensions and present both inside and outside the fetal pelvis. Some tumors are diagnosed in utero, others at birth.

What causes sacroccygeal teratoma (SCT)?

The cause of SCT is not known.



Above is an illustration of SCT.

What is the incidence of sacroccygeal teratoma (SCT)?

Though a rare condition (1 in 35,000–40,000 births), SCT is one of the most common tumors in newborns. Females are four times more likely to be affected than males. Malignancies are more frequent in males.

How is sacroccygeal teratoma (SCT) diagnosed?

SCT is detected by ultrasound as a mass on the fetal buttocks associated with a uterus larger than it should be at a specific gestational age. The reason for this is often polyhydramnios caused by hyper-filtration of the kidneys due to the high output state these tumors cause.

An extremely large SCT can displace the pelvic or abdominal structures of the fetus. Some fetal tumors have been reported as large as 25 cm by 20 cm. Abnormalities of the nervous, cardiac, gastrointestinal, urogenital or musculoskeletal systems may be associated with SCT.

How is pregnancy managed when sacroccygeal teratoma (SCT) is suspected?

While the mortality rate for SCT diagnosed in a newborn is less than five percent, the mortality rate for SCT in utero is 50 percent. Thus, there should be close observation during pregnancy.

Weekly ultrasounds should be performed to confirm or rule out associated abnormalities, monitor amniotic fluid, tumor growth, fetal well being and early signs of hydrops (in utero heart failure).

Weekly fetal echocardiograms will detect early changes in cardiac function with increases in combined ventricular output, increased aortic flow and dilatation of the SVC. After 30 weeks of gestation, weekly amniocentesis may be recommended to determine pulmonary maturity, which may allow for an early delivery.

The mother should be observed for signs of preterm labor, preeclampsia (toxemia), or the “mirror syndrome,” in which the mother mirrors the symptoms of the fetus when placentomegaly has developed. Delivery should occur in a tertiary care hospital where neonatologists and pediatric surgeons are available to provide care.

Sacroccygeal Teratoma (SCT)

What are the fetal interventions for sacroccygeal teratoma (SCT)?

A fetus with a SCT should be followed closely for early signs of hydrops (in utero heart failure), such as ascites, skin orscalp edema or high output cardiac state. These are signs of impending fetal death. Fetal surgery may be performed to resect the SCT and correct the high output state. Fetal surgery is not an option if there are signs of the maternal “mirror syndrome.” Because “mirror syndrome” may be life threatening for the mother, immediate delivery is the best course of treatment.

Contact the Fetal Care Center of Cincinnati

For more information, please call 1-888-FETAL59 or email us at info@fetalcarecenter.org.

