Prenatal Diagnosis of Teratoma in a Torqued Undescended Testis Masked as Unclear Intra-Abdominal Mass

Introduction

Constantly improving ultrasound technologies facilitate prenatal detection of various fetal diseases, including low-incidence disorders that are typically diagnosed postnatally, such as testicular teratoma. These can appear as an unclear cystic intra-abdominal structure, caused by an undescended torqued testis. In the case of such uncertain cystic intra-abdominal lesions, a cryptorchism could lead the investigator to narrow the possibilities to the urogenital tract.

Herein, we report the second case of a prenatally detected cystic-solid lesion being a testicular teratoma by a torqued undescended testis and the seventh case of a prenatally seen testicular teratoma. In late gestation, a structured evaluation of the teres would be beneficial to detect such malformations.

Case Report

A 24-year-old woman, gravida 3 para 0, was referred to our department at 30 + 3 weeks with an undefined cystic intra-abdominal mass in a male fetus. Ultrasound examination confirmed the predominantly cystic tumor with a small solid central part (8 × 13 mm), measuring a total size of 30.4 × 22.9 × 30.2 mm, without vascular flow. The tumor was located between the right lower renal pole and the bladder (Fig. 1). In its largest sagittal extension, the tumor reached into the right middle abdomen and was in cranial contact with the lower liver edge. Based on clinical features, a peritoneal cyst or mesenteric cyst was suspected. Further sonographic examinations at 34 + 4 and 40 + 0 weeks showed no signs of progress. At 40 + 2 weeks, a 3660-g male fetus with Apgar scores of 9, 10, and 10 at 1, 5 and 10 min, respectively, was delivered vaginally.

Postnatal ultrasound examination confirmed the prenatal findings. Moreover the heterogeneous, well-defined round mass (19 × 26 × 23 mm) showed central calcifications, as well as intratresizeal septations with an absence of vascular flow. There was no evidence of affected lymph nodes, as-
and finally getting to the scrotum by 33 weeks could provide orientation for the sonographic examination (R. Achiron et al. Ultrasound Obstet Gynecol 1998; 11: 242–245). Vascularity should also be assessed in this context, as bleeding from teratomas is not uncommon and can lead to fetal anemia.

As seen in our case, after the abdominal cystic lesion was diagnosed, a structured prenatal ultrasound examination of the testis was not performed and the possibility of prepubertal teratoma of the testis was not considered.

In addition, a structured prenatal ultrasound examination of the testis could influence the perinatal management and therefore alter the neonatal outcome. Knowledge of testicular descent times during prenatal life may be helpful when considering the differential diagnosis of abdominal cystic lesions in male fetuses. If diagnosis of a testicular teratoma is considered, early referral to a pediatric surgeon could be made and complications such as torsion could be prevented. If possible, a testis-sparing operation could be performed. Birth should take place in a tertiary referral center and parents must be informed about necessary neonatal follow-up and risk factors as a result of the diagnosis. Further investigations of this rare phenomenon are necessary.

Conflict of Interest

The authors declare that they have no conflict of interest.

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