Antenatal diagnosis of Vasa Praevia: A Case report

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Introduction:
The benefits of antenatal diagnosis and targeted management of vasa praevia were illustrated by a series that reported neonatal survival in 59 of 61 cases (97 percent) suspected antenatally, but only 41 of 94 cases (44 percent) without prenatally suspected diagnosis. Surviving infants without prenatally suspected diagnosis had lower Apgar scores (mean five-minute Apgar score of 4 versus 9) and required more blood transfusions (59 versus 3 percent). The following case was diagnosed prenatally at the Kypros Nicolaides fetal medicine unit.

Case:
A 26 year old G1Po Caucasian British was seen for morphologic scan at 20 weeks and 3 days of pregnancy. The conception was spontaneous and the patient had no significant medical history. On abdominal approach, a low lying anterior placenta was observed, with a succenturiate loop on the posterior wall of the uterus. The trans-vaginal scan demonstrated a communicating vessel running over the cervix. The same findings were seen during several follow-up scans which also showed normal fetal growth. At 32 weeks gestation and after a complete course of corticosteroids, the woman gave birth, by cesarean section, to a healthy male fetus (APGAR 8-9; Ph 7.32; Hct 30; 4.5 lbs). According to the surgical report, the cord insertion was in the lower edge of the placenta. The diagnosis of Vasa praevia was confirmed by the histologic exam.

Discussion:
Prevalence of vasa praevia is approximately 1 in 2500 deliveries, but is much higher in pregnancies conceived following assisted reproductive technologies (1 in 202). The prevalence is also increased in second-trimester low-lying placentas or placenta previa (even if resolved), bilobed or succenturiate lobe placentas in the lower uterine segment, and multiple gestations. Prenatal diagnosis of vasa praevia is based primarily on the identification of membranous fetal vessels passing across the internal cervical os by real-time and color Doppler ultrasound. The membranous vessels may be associated with a velamentous umbilical cord (type 1 vasa praevia) or they may connect the lobes of a bilobed placenta or the placenta and a succenturiate lobe (type 2 vasa praevia). Transvaginal ultrasound examination to look for membranous vessels proximate to the cervical os is reasonable in high risk patients.

References: