

Uterine artery blood flow velocity waveforms in pregnant with mullerian duct anomaly: A biologic model for uteroplacental insufficiency

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OBJECTIVE: The purpose of this study was to determine whether there are demonstrable alterations in uterine artery blood flow in pregnant women with mullerian duct anomaly. **STUDY DESIGN:** Flow velocity waveforms obtained from the placental and nonplacental uterine arteries were studied at 18 to 24 weeks' gestational age in 15 pregnant women with mullerian duct anomaly and in 30 controls. The systolic/diastolic ratios were compared and correlated with the degree of placental laterality and perinatal outcome. **RESULTS:** Systolic/diastolic ratio in the uterine artery was abnormal in 80% of the cases and in 10% of controls ($p < 0.0001$). A completely lateral placenta was found in 10 of 15 women of the study group and only in 1 of the 30 controls ($p < 0.0001$). Women with mullerian duct anomaly had higher systolic/diastolic ratios in the nonplacental uterine artery than those with a normal uterus (median 4.3, range 2.0 to 7.4 vs median 2.8, range 2.0 to 4.0; $p < 0.001$). Twelve of 15 women of the