Early-onset intrauterine growth restriction: predictions factors to diagnosis
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Objective
The aim of this study was to evaluate the association between Prediction Factors related to Early-Onset Intrauterine Growth Restriction (IUGR): Uterine Artery flow velocimetry measured at 12 and 20 weeks of gestation as well as Early Preeclampsia.

Methods
A retrospective study which exhaustively reviewed the medical records of gestations with fetuses diagnosed as Early-Onset Intrauterine Growth Restriction between January and December 2015 was performed. The analyzed variables were: uterine artery mean pulsatility index (PI) measured at first trimester of gestation and 20 Weeks, time of diagnosis and hypertensive disorders related to pregnancy.

Results
In 2015, 20 fetuses met criteria for diagnosis of Early-Onset IUGR, representing an incidence of 0.65%. Of them, the 20% (4) had elevated uterine artery mean PI measured at first trimester of gestation (PI >95th percentile) and the 45% (9) had a pathological uterine artery test at 20 weeks of gestations. If we evaluate the presence of hypertensive disorders in early growth restricted fetuses, we found that more than a half of these gestations (55%) developed hypertensive disorders (gestational hypertension, early preeclampsia). Early growth restricted fetuses with delivery below 32 weeks of gestation (40%) were diagnosed during specific follow-up due to elevated uterine artery mean PI measured at 12 and/or 20 weeks of gestation or due to obstetrical ultrasound that we performed at the time of early preeclampsia diagnosis. 60% of growth restricted fetuses were born at 32 weeks or more. Of these group, the 75% (9) were diagnosed during ultrasound examination at 32 weeks, the 16.67% (2) were diagnosed during obstetrical ultrasound performed at the time of hypertensive disorders diagnosis and only one case was a casual diagnosis.

Conclusion
In our population, Early-Onset IUGR is poorly associated with an elevate uterine artery mean PI at first trimester of gestation and more strongly with a pathological uterine artery test at 20 weeks. However, the strongest association was evidenced by the concomitant presence of Hypertensive Disorders (early preeclampsia).