

The small fetuses: one year of our experience

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Objective

The aim of this study is to evaluate timing, route of delivery and outcomes for fetuses with intrauterine growth restriction (IUGR) on a differentiated perinatal center.

Methods

We performed a retrospective analysis which included 34 of the 54 pregnant women referred to Faro Unit - CHUA with suspected IUGR during the year 2017, in which the diagnosis of IUGR or small for gestational age (SGA) was confirmed. Only simple pregnancies were included. Fetuses were considered IUGR if the estimated weight was below the third percentile or the estimated weight was between the third and tenth percentiles with associated Doppler abnormalities. Fetuses with an estimated weight between the third and tenth percentiles without Doppler abnormalities were considered SGA. The diagnosis was confirmed with ultrasound by sonographers from the prenatal diagnosis center. We analyzed firstly the data considering all the sample (SGA fetuses included) and we analyzed timing and route of delivery as well as the outcomes in IUGR and SGA fetuses separately. We considered early onset IUGR if diagnosed before 28 weeks and late onset after 28 weeks.

Results

The sample included SGA fetuses (14, 7%) and fetuses with IUGR (85, 3%). Considering the entire sample, the mean maternal age was 32, 7 years (32, 2 for IUGR and 35, 6 for SGA group). 23, 5% were smokers (24, 1% of the IUGR and 20% of the SGA group). The prevalence of IUGR fetuses considering the total number of births in this hospital in 2017, excluding multiple pregnancies, was 1, 23%. 94, 1% of the IUGR were late onset. The mean gestational age at diagnosis was 33+5 weeks (33+6 weeks in the IUGR and 32+0 weeks in the SGA group), and the mean gestational age at time of birth was 36 weeks (35+6 in the IUGR and 37+0 weeks in the SGA group). Regarding labor outcomes, and considering only the IUGR fetuses, none had a spontaneous labor, 37, 9% had an induced labor between 34+6 weeks and 39+6 weeks, with 36, 4% of these delivering by Caesarean Section (CS) (50% for non-reassuring fetal status and 50% for failed induction), 44, 8% were submitted to an emergency CS and 17, 3% to an elective CS. Considering the route of delivery, 75, 9% had a CS, 20% were vaginal births and 3, 4% vacuum-assisted births. 55, 2% of the restricted fetuses had abnormal fetal Doppler at time of diagnosis, and 69% at time of birth. From the SGA group, 20% had a spontaneous labor, and 80% had a CS (33% emergency and 66% elective). From the SGA group, 80% had low weight at birth (below 2500 grams), 20% were pre-term and 20% were admitted to the Neonatal Intensive Care Unit (NICU). In the IUGR group, 82, 7% had low weight at birth, 6, 9% having extreme low weight at birth (below 1000 grams) and 17, 2% had very low weight at birth (between 1000 and 1500 grams); 48, 3% were pre-term and 51, 7% were admitted in the NICU, the mean number of days in the NICU was 24, 6 days.

Conclusion

In our hospital, 1, 23% of the newborns were diagnosed prenatally with IUGR. This is a smaller number then described in the literature: 4 and 7% of the fetuses. Our analysis corroborates the fact that pregnancies with IUGR are at increased risk of medically indicated preterm birth, cesarean delivery and admission to the NICU, even when controlled against SGA fetuses.