



PHILIPPINE CHILDREN'S MEDICAL CENTER

Perinatology Section



DETERMINATION OF THE IDEAL TIMING OF DELIVERY AMONG GROWTH- RESTRICTED FETUSES AT LESS THAN 32 WEEKS AGE OF GESTATION USING A STAGE-BASED DOPPLER PROTOCOL FOR ADMITTED PATIENTS FROM JANUARY 1, 2010 TO SEPTEMBER 30, 2021 AT PHILIPPINE CHILDREN'S MEDICAL CENTER: A RETROSPECTIVE, COHORT STUDY

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INTRODUCTION:

The main dilemma in managing **EARLY ONSET FETAL GROWTH RESTRICTION (FGR)** lies on timing the delivery via creating an ideal balance of minimizing hypoxia-induced fetal injury versus the risks of iatrogenic preterm delivery.

The study's objective is to determine the ideal timing of delivery using a stage-based doppler protocol basing it from the stage with the least acidosis and mortalities.

Keywords: Early Onset Fetal Growth Restriction; Doppler Staging; Ideal Timing of Delivery; Uteroplacental Insufficiency

METHODOLOGY:

A retrospective-cohort study of 67 singleton-pregnant women with early onset FGR admitted from January 2010 to September 2021 was conducted. Primary outcomes were arterial pH at birth and mortalities, while secondary outcomes included neonatal morbidities. Doppler stage during delivery was identified and correlated with neonatal outcomes.

RESULTS:

Primary neonatal outcomes showed that acidosis is comparable in Stages II and Stage III (50% vs 50%). However, an increase in neonatal morbidities and a 63% increased risk of fetal death was seen when delivery is prolonged from Stage II to III (18.75% vs 50%).

CONCLUSIONS AND RECOMMENDATIONS:

The recommended stage for delivery is **STAGE II** in which fetal acidosis and mortalities were low. Future studies should include a larger sample size to arrive at more statistically powered and conclusive results.

