Maternal Primary adrenal cortex insufficiency during pregnancy: Spotlight on the Fetus and the Neonate. A systematic review and meta-analysis

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INTRODUCTION
Primary adrenal cortex insufficiency, congenital or acquired, first occurring during pregnancy is a rare condition. Due to this rarity the adverse effects of PAI especially during fetal and neonatal period, when body, sex and organ conformation is determined, are infrequently collected.

AIM
To summarize current knowledge regarding maternal primary adrenal cortex insufficiency and its impact on pregnancy outcomes.

To quantitatively assess the effect of the above diagnoses on the prevalence of miscarriage, preterm birth, the occurrence of SGA neonates, as well as the neonatal birth weight.

METHOD
PubMed, and Cochrane Controlled Register of Trials (CENTRAL) databases were searched. Categories of interventions examined: AD, APS, bilateral adrenalectomy and CAH (21-hydroxylase deficiency).

Type of outcome measures: birth, SGA, IUGR, virilization, spontaneous abortion, prematurity, birth, fetal death.

Electronic search and screening and risk of bias assessment was done by two authors independently. A narrative synthesis and analysis of the results, and a subgroup analysis were conducted. The heterogeneity between studies was assessed by the estimation of Cochrane’s Q and I² statistic.

CONCLUSIONS
The prevalence of miscarriage is 22% among PAI women and may reach 27% among CAH women. This prevalence is 18% among AD women.

The prevalence of prematurity is 13% among PAI women, and among the CAH, AD subgroups.

The prevalence of SGA neonates from PAI others is 9%. This rises to 13% among CAH cases.

Mean birth weight normal range in all groups
Fetal congenital anomalies are seldom

REFERENCES

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