

EP11: HIGH-RISK PREGNANCY

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Incidence and complications of obstructive sleep apnea in high-risk pregnancies

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Objectives: To describe the incidence during gestation of Obstructive Sleep Apnea (OSA) in cardiometabolic-risk pregnancies and to evaluate pregnancy complications due to OSA in these high-risk pregnancies.

Methods: This is an observational study performed in a tertiary maternity in Barcelona, Spain. Between 2021-2023, 30 pregnant women during 2nd trimester of gestation were included. Inclusion criteria were body mass index >30, maternal age >40 years, assisted reproduction techniques and chronic hypertension. Patients diagnosed of OSA before pregnancy were excluded. To diagnose the OSA, home respiratory polygraphy (PR via Alice Night One) was performed. OSA was diagnosed when AHI (Apnea-Hypoapnea Index) was above 5, considering severe when AHI >30, moderate when 15-29.9, and mild when 5-14.9. Apart from the PR evaluation, regular obstetric surveillance according to local protocols were performed.

Results: A total of 23.3% patients were diagnosed of OSA, being 5 milder forms, 2 moderate and none were severe. In our sample, the cardiometabolic risk factor most related with OSA was chronic hypertension (0% vs 28.6, p 0.048). Regarding perinatal results,

patients with OSA presented significantly shorter gestational age (39.2 vs 37.5, p 0.017), a higher blood pressure control (SBP 112 vs 130, p < 0.001; DBP 70 vs 78, p 0.030), lower APGAR scores (10 vs 8-10, p 0.011), higher incidence of neonatal intensive care unit admission (NICU) (4.5% vs 42.9% p0.034), with trends in lower birthweight (3314 vs 2749, p 0.05) and needed to be delivered by a Caesarean section (30.4% vs 71.4% p 0.084).

Conclusions: Up to 23.3% of pregnancies with cardiometabolic risk factors may suffer from OSA, especially those pregnancies affected by hypertension. Although sample size limitations, in our study OSA seemed to even worsens the pregnancy outcomes of these high-risk pregnancies.