

The Utility of Uterine Artery Doppler Velocimetry (UtAD) in the Prediction of Fetomaternal Outcomes in Pregnant Women with Antiphospholipid Antibody Syndrome (APS) – A Systematic Review and Meta-Analysis

John Edward O. Tanchuco, MD, DPOGS | Koleen C. Pasamba, MD, DPOGS | Joselito A. Santiago, MD, FPOGS, FPSMFM, FPSUOG

Methodology

Systematic Literature Review + Meta-analysis conducted according to PRISMA 2020 Guidelines. Primary outcomes considered were:

- 1 **Preterm Birth**
- 2 **Preeclampsia**
- 3 **Growth Restriction**
- 4 **Small for GA Baby**
- 5 **Fetal Death**

Objective

Evaluate current evidence on the role of **UtAD** in predicting **fetomaternal outcomes** among **pregnant women with APS**.

Systematic Review

Eight studies included, **prospective** and **retrospective cohorts**, with **high risk of bias**.

Results

Reliable **screening test** for ruling out **overall adverse fetomaternal outcomes** (Sp 0.91, 95% CI 0.86-0.94) in the **second to third trimester**.

Conclusion

UtAD may be used as a **screening test** among pregnant women with APS at **high risk for adverse fetomaternal outcomes**.

Recommendations

- Report all **quantitative** uterine artery Doppler indices
- **Standardization** of methods
- Produce **diagnostic cut-off values** for treatment
- Large **multi-center cohort**

Quality of Evidence

Low to moderate certainty of evidence based on GRADE.

