Midtrimester uterine artery Doppler to assess aspirin resistance and its clinical utility

Uterine artery Doppler necessary to rule in or rule out aspirin resistance at dosage administered.

Prevalence of aspirin resistance is dose dependent and ranges between 7% - 27%. *Dalen. The American Journal of Medicine Jan 2007 v120, iss 1, p 1 - 4.

Clinical utility of uterine artery Doppler for patients on aspirin - abnormal uterine artery doppler is consistent with aspirin resistance and confers persistent increased risk for placenta-related adverse obstetrical outcomes despite continued aspirin administration.

_patient education as to signs and symptoms of preeclampsia

_increased frequency of clinical monitoring of maternal blood pressure and urinalysis for proteinuria.

Chronic hypertension is a risk factor for development of preterm preeclampsia despite aspirin prophylaxis.

ASPRE trial: risk factors for development of preterm preeclampsia despite aspirin prophylaxis. *Shen. Ultrasound Obstet Gynecol 2021; 58: 546-552.

Reply - Poon. Ultrasound Obstet Gynecol 2021; 58: 642-646.

Reply - Giorgione. Ultrasound Obstet Gynecol 2021; 58: 642-646.

Optimal dose of aspirin for the prevention of preterm preeclampsia.

*Letter to the Editors. Ghesquiere. AJOG. Nov 2023 p574

- no trial in developed countries has demonstrated a benefit of 80 or 81 mg for the prevention of preeclampsia.

- a recent metaanalysis, including 4 randomized trials, suggests that a dose of 150 to 162 mg is superior to 75 to 81 mg for the prevention of preterm preeclampsia.

- 60 mg of aspirin is ineffective in preventing preeclampsia

- a dose-response effect has been demonstrated between 60 mg

and 150 mg, with the currently established optimal dose being >100 mg.

- the maximum beneficial effects have been observed with a dose of 150 mg

*Horgan.Low-dose aspirin therapy for the prevention of preeclampsia: time to reconsider our recommendations? AJOG. 2023;229:410–8

*Roberge. Aspirin for the prevention of preterm and term preeclampsia: systematic review and metaanalysis. AJOG 2018;218:287–93.e1.

*Roberge. The role of aspirin dose on the prevention of preeclampsia and fetal growth restriction: systematic review and meta-analysis. Am J Obstet Gynecol 2017;216:110–20.e6.

*Ghesquiere. Comparing Aspirin 75 to 81 mg vs 150 to 162 mg for prevention of preterm preeclampsia: systematic review and meta-analysis. AJOG. MFM 2023;5:101000.