

## **PREECLAMPSIA – OUTPATIENT CLINIC SCREENING AND MANAGEMENT**

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Formal assessment of the risk of pre-eclampsia (PE) should be made early in pregnancy and antenatal care planned accordingly. High-risk group of patient should be effectively detected during the outpatient clinic management. Severe cases of developed PE demands urgent treatment in hospital, intensive antihypertensive therapy and 24-hour feto-maternal monitoring. However, some authors consider that less severe cases of PIH and PE could be followed up on the level of well equipped outpatient clinics. Despite to the previous statements, our opinion is that only an effective screening is a matter of outpatient clinic, but developed cases of PIH and PE deserve intensive hospital treatment. Possible drug prevention of PE also can be the subject of outpatient clinic therapy.

Ambulatory blood pressure monitoring and urine analysis in association with Doppler velocimetry of the uterine arteries in the second trimester are *the first level screening tests* in the detection of pre-eclampsia (PE). Blood pressure monitoring in a single association with Doppler velocimetry show a positive predictive value of approximately 40% and negative predictive value of 88-92% in the prediction of PE and adverse perinatal outcome. The association between PE, IUGR and increased uterine artery resistance measured by Doppler ultrasound has been established and waveform of analysis of the uterine arteries has been accepted as a screening test for related complications. The absence or early disappearance of uterine artery protodiastolic notching is associated with fewer complications related to uteroplacental insufficiency and normal birth weight. However, late and partial disappearance of notching, or its bilateral persistence tends to compromise the pregnancy outcome. This vascular phenomenon is closely related to defective placentation because of early endothelial dysfunction. Despite to the conflicting results due to a lack of standardized analysis of uterine artery waveform, patients with bilateral notching at 24 weeks of gestation represent a group at risk for preeclampsia and associated complications.

Maternal serum measurements of several markers (*the second level test*) may add significant prognosis information for predicting PE in pregnant women showing specific Doppler alterations in the late second trimester. Women with high resistance utero-placental circulation at risk of PE show elevated concentrations of : hCG, AFP, fibronectin, ADMA ( asymmetric dimethylarginine ), lipoprotein-A, activin-A and inhibin-A.