Maternal uterine artery Doppler in the first and second trimester as screening method for preeclampsia and fetal growth restriction

Kashami Arian¹, Troshani Amela¹, Gliozheni Orion¹ and Shabani Zamira²

¹University Hospital of Obstetrics and Gynecology “Koço Gliozheni”, Albania
²University of Shkodra, Albania

Preeclampsia (PE) and fetal growth restriction (FGR) are serious complications of pregnancy, which are associated with high morbidity and mortality. The aim of this study was to examine the value of uterine artery Doppler at 11-14 and 20-24 weeks of gestation in the identification of women at risk of developing preeclampsia and fetal growth restriction. This retrospective cohort study comprised 212 singleton low risk women undergoing routine antenatal care at Koco Gliozheni Hospital. The right and left uterine arteries were identified using colour flow mapping and velocity waveforms were obtained using pulsed Doppler. The mean pulsatility index of the two arteries was determined and the predictive value of a mean resistance index > the 95th centile, as well as the presence of a bilateral protodiastolic notch recorded at 11 to 14 and 20 to 24 weeks’ gestation, in the prediction of preeclampsia and/or fetal growth restriction, were calculated. The ultrasound machine used was Aloka Echo Camera L. Compared to the pregnancies with a normal UA mean RI at the first and second trimesters, pregnancies with UA mean RI >95th percentile only at the first trimester showed an increased risk for pre-eclampsia. 8.8% developed PE

Biography

Kashami Arian has completed his studies in Medicine at University La Sapienza, Rome, Italy (1993-2000) and then studied for the speciality of Obstetrics and Gynecology, at the School of Specialization, La Sapienza, Rome, Italy (2001-2006). He has done an intensive 5 months course at the Artemisia Clinic (Leader in Prenatal Diagnosis), at the Department of Prenatal Diagnosis, Rome, Italy (Dec’ 2006 – Apr’ 2007). He has worked as an Obstetrician and Gynecologist at PolClinica Umberto 1, in Roma (2000-2004); Hospital San Giovanni Addolorata, Rome, (2004-2007), Clinica Villa Europa (2005-2007). From January 2009 until now, he works as an Obstetrician/Gynecologist, at the University Hospital of Obstetrics and Gynecology “Koço Gliozheni”, Tirana, Albania. He has published more than 12 papers in reputed journals and has been a Lecture in some international and national conferences. Now he is a candidate for PhD.

ariankashami@gmail.com