

SUPRASELECTIVE VASODILATOR THERAPY IN PREECLAMPSIA

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In the last 15 years several worldwide scientific groups consistently reported the existence of LH receptors in extragonadal sites. The most astonishing location was found to be in the vascular smooth muscle layers of uterine and spiral arteries. Subsequent studies using doppler measurement revealed that hCG administration in first trimester pregnancies was followed by decreasing of uterine artery resistance index.

Objective: The aim of the current workout is to establish the effect of hCG vasodilator effect by pulsatile hCG administration in cases of pregnancies complicated with with preeclampsy.

Material and Method: study design: prospective, nonrandomised study. Inclusion criteria: pregnant women with PIH and clinical or paraclinical signs of preeclampsia. Exclusion criteria: documented cases of trombophyllia. Protocol: hCG 5000 ui intramuscular each 3 days . Therapeutic effect was quantified by: Doppler measurement every 2 weeks of uterine and umbilical arteries blood flow (RI and wave-form evaluation), maternal clinical evaluation, fetal asessment, intrauterine fetal growth asessment, maternal renal function asessment, neonatal outcome. End-points: improvement of uterine arteries RI and wave-form, intrauterine fetal growth parameters, maternal arterial pressure and maternal clinical and biological parameters.

Results: the majority of patients receiving hCG showed improvement of uterine IR, normalization of biological markers, clinical symptoms improvement and fetal growth restriction was recuperated.

Conclusions: Therapeutic administration of hCG in pregnancies complicated with preeclampsy seems to improve uteroplacental flow and lower preeclamptic complications. The postulated mechanisms of the hCG effect in impaired placentation include vasodilatation by prostaglandin production in vascular walls and angiogenetic effect by promoting VEGF production

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