Cardiac overload in hypertensive pregnancies

Clinic for Gynecology and Obstetrics, Skopje, R. Macedonia, Skopje, FYROM

Objective
To evaluate the correlation between cardiac overload and hypertension in pregnant women in Macedonia and to increase awareness that hypertension in pregnancy might have long-term consequences.

Methods
The study was performed at the University Clinic for Gynecology and Obstetrics, Skopje, Macedonia. The study involved 48 singleton pregnancies randomly selected from the outpatient clinic. They were assessed at 28 weeks of gestation and divided into three groups: Group 1 Pregnanacies with normal blood pressure (n=22) Group 2 Pregnanacies with gestational hypertension (n=15) Group 3 Pregnanacies with preeclampsia (n=11) For each patient a complete blood analysis was performed and the blood pressure was measured. Echocardiography was performed at the time of recruitment, two week afterwards and 6 months after delivery.

Results
In normal pregnancies the heart function returns to normal after 6 months. In the second group in 2 out of 15 patients the final echocardiography showed asymptomatic left chamber hypertrophy/dysfunction. The group with preeclampsia showed changes in the heart structure indicative of stage B heart failure (asymptomatic) in 4 out 11 patients.

Conclusion
Although, this is a small scale study the results are consistent with results showed in larger studies. There is a relation between pregnancy and hypertension. Pregnant women who develop hypertension and especially preeclampsia should have long-term follow-up after delivery. Women with stage B heart failure are at increased risk of morbidity/mortality compared to the normal population. These patients should be follow-up closely and appropriate multidisciplinary management should be applied.