



Maternal abnormal diastolic relaxation in pregnancies with gestational hypertension/preeclampsia

Kjaev I, Daneva A, Tanturivski M, Stefanija A, Milkovski D, Andonovski D, Spasova R, Kocoski G
Clinic for Gynecology and Obstetrics, Skopje, Skopje, FYROM

Objective

To assess cardiac diastolic dysfunction in women with gestational hypertension/ preeclampsia by Doppler echocardiography and to correlate severity of dysfunction.

Methods

The study was performed in the University Clinic for Gynecology and obstetrics, Skopje, R. Macedonia. The study involved 48 singleton pregnancies chosen from the outpatient clinic in 28 weeks of gestation. For each patient complete blood work was done and TA was measured and by that divided into one of the 3 groups. Group 1: normal TA (22), Group 2: gestational hypertension (15) and Group 3: preeclampsia (11). They were sent for echocardiography in the start of the study (28 GW), 2 weeks after delivery and 6 months after delivery. If diastolic dysfunction was seen it was further divided in the four basic Echocardiographic patterns of diastolic heart failure, which are graded from I to IV.

Results

Pregnant women with preeclampsia/gestational hypertension had echocardiographic findings consistent with diastolic dysfunction in 39% of the evaluated group upon admission to the study. On follow up two weeks postpartum 29% had diastolic dysfunction and 6 months postpartum the percentage was 23. Those patients that still fulfilled the criteria for diastolic dysfunction 6 month after delivery were recommended to be closely monitored by a cardiologist. Fortunately in 93% of the evaluated cases we saw grade I dystolic dysfunction (abnormal relaxation) and in 7% we found grade II diastolic dysfunction (pseudonormal filling dynamics).

Conclusion

Diastolic dysfunction is consistent with B stage heart failure or the asymptomatic phase. Life style modification and close surveillance is needed in order to prevent C stage heart failure or the symptomatic phase.