Title: Ultrasound markers of pregnancy complications in 1st trimester in women with retrochorial hematoma

Abstract:

Context: It is well known that the risk of early miscarriage with formation of retrochorial hematoma may be a predictor of early and late complications. Objective: To determine the significance of echographic parameters of the embryo and extraembryonic structures in detection of retrochorial hematoma (RCG) in I trimester. Patients: We studied 121 pregnant women in terms of 6-10 weeks of pregnancy: 63 with RCG (main group), the gestational age when hematoma was revealed comprised 7,6±1,2 weeks; 58 healthy pregnant women (control group), the average time of ultrasound was 7,2±0,8 weeks. Intervention: Ultrasound examination was performed on the Philips HD 11. Main outcome measures: CRL, heart rate, yolk sac, chorion localization, its structure, the size of hematoma, its volume, localization, stage of development were evaluated. Results: The volume of RCG in patients of the main group was 0.72-2.8 cm³ (1,2±0,46 cm³). CRL in patients with RHG was 10,3±3,7 mm, in the control group - 15,65±5,9 mm (r<0,05). CRL backlog of gestational age of more than 7 days was in 36% (23) of pregnant women with RCG, while the control group did not meet this criterion (r<0,05). Corporal localization of hematoma was observed in 71% (45), supracervical - in 29% (18) of patients in the main group. CRL backlog of more than 7 days occurred in 70% (16) of patients with corporal localization of hematoma, while in women with supracervical hematomas - in 30% (7) (r<0,05). Silent miscarriage was observed in 13 patients with RCG (21%), while the backlog of CRL of more than 7 days in this group of patients was detected more often than in women with prolongation of pregnancy. Conclusion: The unfavorable prognostic echographic signs in women with retrochorial hematoma in I trimester are lagging of CRL of gestational age of more than 7 days and corporal localization of the hematoma.