PREMEDICATION OF PREGNANT WOMEN AT RISK OF DEVELOPING ABNORMAL LABOR ACTIVITY WITH VASOACTIVE AND METABOCALLY ACTIVE SUBSTANCES

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Objective: *To study the efficiency of Instenon (preparation consisting of 3 substances possessing vasoactive and metabolically active properties: ethophylline, hexobendine and etamivane) used for antepartum preparing pregnant women of a risk group for the development of abnormal labor activity.*
Methods: *Preparation for labor with Instenon was carried out in 52 pregnant women. The women underwent cardiotocography, hysterography, ultrasonography, dopplerometry and intrapartum fetal ECG. Statistical reliability was determined using Student"s t-test.*
Results: *The administration of Instenon as a means of preparation for labor resulted in an improvement of structural changes of the cervix, a significant decrease in the frequency of abnormal labor activity, total duration of labor, percentage of surgical delivery, maternal traumatism and of blood loss amount in labor. All newborns had high Apgar score (7 to 9).*
Conclusions: *The experience of clinical using Instenon testifies its high efficiency in the antepartum preparing of pregnant women with the high risk of development of abnormal labor activity.*

VENOUS RETURN TO THE FETAL HEART FROM THE FETAL BRAIN

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Objective. *To compare venous return from fetal low body and venous return from fetal brain.*
Methods. *Blood flow waveforms in the inferior vena cava (IVC) and jugular vein (JV) were recorded in 30 normal fetuses at 13-16, 21-24 and 29-32 weeks of gestation (Aloka 2000). The IVC and JV flow velocity waveforms consisted of three components: the first represented forward flow during ventricular systole; the second component represented forward flow, which was coincident with early diastolic fillings; the third component depicted reverse flow reflecting atrial contraction. Time-velocity integral of forward flow (TVI FF) and time-velocity integral of reverse flow (TVI RF) were measured. Percent of reverse flow (%RF= TVI RF/ TVI FF) was calculated.*
Results. *In fetuses at 13-16 and 21-24 weeks of gestation reverse flow during atrial contraction expressed as %RF, was significantly greater in IVC (19,3±6,4%; 10,4±4,9%) than in JV (5,3±2,5%; 6,2±1,7%, $p<0,001$). In fetuses at 29-32 weeks of gestation there was not different %RF in IVC and JV (6,2±1,7% and 5,2±2,9%,$p>0,10$).*
Conclusions. *Our findings have suggested that fetal cardiac preload decrease with gestational age. %RF in IVC is greater than one in JV that may reflect special condition for venous return to fetal heart from fetal brain during normal pregnancy.*