

The new methodology for appraisal of maternal haemodynamics

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The idea for this study is based on endothelial-dependent adaptation of haemodynamic circulation in pregnancy. It is important to understand that all organism mechanisms providing pregnancy depend, foremost, on the haemodynamic system and the priority role of the perfusion complex (volume-tube-pump-pressure-blood flow) – pumping function of heart. Multicentral description of “haemodynamic model” of the examined conditions (not pregnant and pregnant women) was made basis on antropo-physiological research of the circulatory state of the CVS, using the diagnostic system ANTROPOS-CAVASCREEN, which is an innovative diagnostic complex for analysing the performance of various blood circulation sections using non-invasive methods.

With the examined modes for BP was analysed expression of circulatory syndromes of HF at them haemodynamical-

ly identified by diagnostic algorithm worked out by us, as a system estimation of pumping function of heart (PFH) in the circulatory state of the CVS. PFH additionally was estimated by trimester measuring of cardiac output and cardiac index on body weight separately in standing and lying positions. By antropo-physiological ratio of CO upright/lying typological description of dynamic organization of the circulatory state of the CVS was made. The last was presented by three types of blood circulation: type I or hypokinetic state, with the decrease of BP in standing position (93% and less) comparing to its size in a prone position; type II or eukinetic state, with BP of 94-106% from standing to lying position; and type III or hyperkinetic state, with increase of BP up to 107% or more in the upright position.