

nancy appeared of 206 out of 317 sick people with the infertility ($64,98\% \pm 0,03$): from them in $85,92\% \pm 0,02$ (177/206 cases) the patients with operated tumorous formations of ovaries and in $14,08\% \pm 0,02$ (29/206 cases) the patients with operated benign tumors of ovaries.

Resume. Thereby, modern technology of curing the infertility of women with the pathology of ovaries consists in the early revealing of reason and successive carrying out of cure stages. While the absence of positive effect from the traditional ways of curing the infertility during 1 year, it's reasonable to recommend the overcoming of infertility by the methods of ART. Modern higheffective methods of curing of infertility (hormonal preparations, endoscopic methods and methods of auxiliary reproductive technologies) are the links of one circuitry, the final aim of which is maximal rapid realization of reproductive function of woman.

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CHANGES OF FUNCTIONAL CONDITION OF ENDOTHELIUM AND MECHANICAL BEHAVIOR OF VESSELS OF SICK MEN WITH THE ARTERIAL HYPERTENSION WITH METABOLIC SYNDROM UNDER THE INFLUENCE OF THERAPY

Shishova A.S., Knyaseva L.A., Knyaseva L.I.,
Stephchenko M.A., Goryainov I.I.
Kursk state medical university

Metabolic syndrome (MS) at the last years owing to wide spread is called "epidemic of highly developed countries". The components of MS in aggregate with arterial hypertension (AH) cause the development of cardiovascular complications.

By the researches of last years there is established the connection of pathological changes, which are connected with mechanical behaviors of the wall of artery and frequency of appearance of cardiovascular complications. It was revealed that increase of speed of developing of pulse wave (SPW) is registered at early stages of sick men with cardiovascular pathology. There is noted the multifactorial essence of rising of rigidity of vessel and the role of endothelial dysfunction, as one of the base mechanisms of progressing of cardiovascular pathology. Therefore as perspective there

is considered the assessment of influence of anti-hypertensive therapy to the indicators of endothelial function and rigidity of vessels with the aim of studying the possibilities of opposite development of these abnormalities, what can lead to the decrease of the risks of development of vascular catastrophe of AH sick men with MS.

The aim of work: study of interconnection between the indicators of endothelial function and characteristics of elastic behaviors of vascular channel of sick men with arterial hypertension in combination with metabolic syndrome.

Materials and methods. There were examined 98 sick men with AH of 2 stage with the metabolic syndrome at the age of 40-60 years, 78 men and 20 women. The presence of metabolic syndrome was defined by the criterions of WHO. AH was defined in correspondence with the classification of All-Russian Scientific Society of Cardiologists (2008). The group of control was formed by 20 clinically healthy persons, the group of comparison was formed by 30 sick men without metabolic syndrome. The level of endothelin-1 (ET-1), the Willebrand factor (fW) were defined by immunofluorescent method. Elastic behaviors of vascular wall were estimated with the help of twenty-four-hour monitor of arterial pressure of company "Petr Telegin" (Russia). Static treatment of the results of research was carried out with the use of standard package of applied programs Statistica.

Results and their discussion. The assessment of functional condition of endothelium of vessels of AH sick men showed reliably big concentration ET-1 ($59,8 \pm 2,3$ ng/l) and fW ($169,8 \pm 5,2\%$), being laboratorial markers of endothelial function, of examined sick men in comparison with control. In the group of sick men with a combination of AH and MS there was revealed maximal high concentration of ET-1 ($78,9 \pm 3,8$ ng/l) and fW ($189,3 \pm 6,1\%$). AH sick men in combination with MS have definitely reliable decrease of time of development of pulse wave (RTT) by 31% in comparison with control ($165,8 \pm 4,8$ m/s) and by 26% by patients with AH without MS. Maximal speed of increase of arterial pressure (dPdt)max, which indirectly reflects the load to the wall of vessels during the passing of pulse wave, was lowered in 2,1 times with the AH sick men. The index of rigidity (ASI) of patients with Ah by 28% ($p < 0,01$) exceeded control values and by 13% of AH sick men with MS, and index of augmentation (A|x) in 3,4 and 1,6 times accordingly ($p < 0,01$). Revealed changes testify to the presence of endothelial dysfunction and decrease of elastic behaviors of vessels of AH

sick men, the biggest changes of researched indicators were established while the combination of AH and MS. The definition of speed of spreading the pulse wave (SDPW), which is a criterion of arterial rigidity, shows an exceeding of control level ($137,8 \pm 2,3$ m/s) by 25% and by 12% SDPW at the group of comparison. Carried out correlated analysis revealed the presence of reliable connections between the level of ET-1, fW and SDPW ($r=0,63$; $r=0,51$ accordingly). Reverse dependences were established between RTT and content of ET-1, fW ($r=-0,59$; $p<0,01$; $r=-0,47$, $p<0,01$ accordingly). Also straight correlated dependence was defined between the index of rigidity (ASI), augmentation (A/x) and level of ET-1 ($r=0,69$, $p<0,01$; $r=0,53$, $p<0,01$). Received facts testify to the pathogenetic meaningfulness of endothelial dysfunction at the decreasing of elasticity and rise of rigidity of vessels of AH sick men the most important changes of showings of endothelial function and rigidity of vessel channel were defined while the combination of AH and MS.

To all AH sick men with metabolic syndrome at the phone of hypocholesterolemic diet and taking of simvastatin 20 mg/a day there was prescribed an equator 1 tablet a day. After 12 weeks of therapy 81,6% of sick men have reached the normalization of the level of AH, 19,4% have decrease not less than by 15% from the initial level. The control of showings of endothelial function establish reliable decrease of concentration ET-1 (by 16,5%) and fW (by 26,4%). There was noted the decrease of rigidity of arterial channel by 20,5%, the index of rigidity decreased by 14,8% ($p<0,05$). Received facts testify to that fact, that side by side with hypotensive effectiveness the equator has a vasoprotective action.

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