
THE ROLE OF IVF IN TREATMENT OF INFERTILE MARRIAGE

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The infertile marriage represent the serious medical-social problem. The development of the modern methods of diagnosis permits to determine the main causes of infertility and to solve the problem of the choice of treatment method in time. The structure and main causes evoking the aphoria on patients of dispensary group in Center of human reproduction, definition of couple's group can be treated by IVF method were the main purposes of research.

827 matrimonial couples with infertility continued in 6,5+0,5 years average were subject to clinical-laboratory analysis. The primary sterility was presented in 53 % of cases, secondary sterility – in 47 % of cases. The tubal sterility was presented in 43 % of cases, endocrine – in 14 %, associative - in 43 %. Hyperandrogyny was presented in 50 %, hyperprolactinemy – in 30 %, polycystosis of ovary – in 22 %. In 21 % was presented the male infertility. The 11 % of examined were sent to laboratory of IVF for treatment (women with tubal sterility, men with oligozoospermia and aspermia). After unsuccessful conservative treatment to 25 % of matrimonial couples were offered the treatment by IVF and ICSI methods. Thus the treatment of infertility by IVF method were prescribed to 36 % of couples with prolonged sterility. The rate of pregnancy in this group composed 22 %.

ENDOGENOUS INHIBITORS OF THE Na,K-ATPase IN PREECLAMPSIA

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Objectives: *Previously we have shown, that mammalian tissues contain a steroidal inhibitor of Na,K-ATPase which is similar to Amphibian vasoconstrictor hormone, marinobufagenin (MBG). The mammalian MBG is implicated in plasma volume dependent forms of hypertension. We compared plasma levels of MBG, in normotensive pregnancy and in preeclampsia with that of ouabain-like compound (OLC), and characterized the partially purified MBG immunoreactive factor from preeclamptic plasma.*

Methods: *Plasma MBG and OLC were measured by solid phase fluoroimmunoassays. MBG- and ouabain immunoreactive materials were partially purified from preeclamptic plasma via reverse-phase HPLC and studied for their ability to react with MBG and ouabain antibodies, and to inhibit the Na,K-ATPase from human mesenteric arteries. Vasoconstrictor effect of authentic MBG was studied in isolated rings of human umbilical arteries.*

Results: *In 11 nonpregnant controls plasma concentrations of MBG and OLC were 0.19 ± 0.04 nmol/L and 0.297 ± 0.037 nmol/L, respectively. In the third trimester of noncomplicated pregnancy ($n = 6$), plasma MBG increased (0.625 ± 0.067 nmol/L, $P < 0.05$), and OLC did not (0.32 ± 0.07 nmol/L). In 15 patients with preeclampsia plasma levels of both MBG and OLC increased dramatically (2.63 ± 0.10 nmol/L and 0.697 ± 0.16 nmol/L, respectively, $P < 0.01$ vs. both control groups). When fractionated by reverse phase HPLC, OLC and MBG were eluted by 18% and 48% acetonitrile, respectively. Serially diluted samples of MBG and OLC immunoreactive material from HPLC fractions reacted with MBG and ouabain antibody in a concentration dependent fashion. Authentic MBG constricted isolated rings of human mesenteric arteries in a concentration-dependent manner. HPLC purified MBG immunoreactive material from preeclamptic plasma inhibited Na,K-ATPase purified from human mesenteric artery similarly to the authentic MBG.*

Conclusions: *Our observations demonstrate the coexistence of a more polar OLC and a less polar MBG-like compound in human plasma. Substantial increases in plasma OLC and MBG immunoreactivity in preeclampsia, along with the vasoconstrictor properties of authentic MBG and Na,K-ATPase inhibitory activity of human MBG immunoreactive factor, suggest, that in preeclampsia, plasma concentrations of MBG are elevated enough to substantially inhibit the sodium pump in cardiovascular tissues. These findings attribute MBG a pathogenic role in the preeclamptic hypertension.*