
PATOGENESIS-BASED EFFECT OF MAGNESIUM - SULFATE IN TOXEMIA OF PREGNANCY

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Objective: *The universal significance of magnesium sulfate in the treatment of toxemia of pregnancy doesn't exclude the necessity of the correct pathogenesis - based proves. Nowadays it is believed to be justified to consider the development of toxemia of pregnancy in connection with endothelial dysfunction. That is why the purpose of this research is studying the influence of the treatment with magnesium sulfate on the indicates of intravascular - platelet hemostasis.*

Methods: *101 pregnant women with toxemia of pregnancy have been checked up. The dose of magnesium sulfate (i/v infusions) made 7,5 gr of solid substance by the velocity of infusion 2 gr/hour with the subsequent i/m injections - 6 gr of solid substance at one injection in 4, 4, 4 and 6 hours correspondingly. In the samples of the venous blood before, during and in 24 hours after the treatment the marks of the endothelial dysfunction were defined: the number of circulating endotheliocytes, von Willebrand factor (hard-phase immune-enzyme analysis with monoclonal antibodies), tissular stimulator of plasminogen (photometric method), intravascular platelet aggregation (modified method by Wu and Hoak).*

Results: *It has been stated that magnesium sulfate in toxemia of pregnancy has an obvious protection effect on endothelium. Thus, after the treatment with magnesium sulfate the number of circulating endotheliocytes in women with nephropathy decrease by 2 times, in women with preeclampsia - by 1,7 times with the absence of changes of the levels of von Willebrand factor and tissular stimulator of plasminogen. Intravascular platelet aggregation obviously decreased: in nephropathy I by 12%, nephropathy II - by 18%, nephropathy III - by 23%, preeclampsia - by 22,4%.*

Conclusions: *Thus, the results we got showed that the treatment with magnesium sulfate in toxemia of pregnancy decreases the manifestations of the endothelial dysfunction and, so may be regarded as a pathogenesis - based treatment.*

THE ASSESMENT OF THE REPRODUCTIVE FUNCTION IN WOMEN WITH BONE LOSS

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It is known that cessation of estrogen secretion is well-accepted to have a major role in pathogenesis of bone loss. The aim of the study is to analyses the state of reproductive system of examined patients with osteopenia and great risk for fractures. We examined 150 histories of women patients with osteopenia and great risk for fractures. The average age of patients is $41,2 \pm 0,4$ years. All the women were diagnosed using dual-energy x-ray absorptiometry. Tscore of bone mineral content is $-2,13 \pm 0,07$ SD in the zone L_1-L_4 . The patients have the beginning of menstrual function at age $14,3 \pm 0,2$ year. 6 % of them have disorders of menstrual cycle such as unregular menses, oligomenorrhea. The amount of pregnancies resulted in delivery is $1,8 \pm 0,3$, resulted in abortions is $5,6 \pm 0,05$. The period between pregnancies were short, and 24 % of women have interval between pregnancies resulted in delivery less than two years. The lactation period is $8,3 \pm 0,4$ months. None of the women used hormone contraceptive aids. Menopause begins earlier then usual at $41,4 \pm 0,6$ years. Only 28 % of the patients have physiological menopause. 64% of them have become menopausal after surgical operations such as hysterectomy - 9%, hysterectomy with singl ovarioectomy - 13%, hysterectomy with total ovarioectomy - 42%. Some of the women (8%) suffered from earlier menopausa after mental stress. Endometriosis prevails (76%) among gynecological diseases that caused operation. Myoma presences in 13% cases, cysts of ovarium are more frequent - in 31% of the patients. Only 12 % of the women received hormone treatment or hormone replacement therapy for $5,6 \pm 0,1$ months. According to the study such risk factors of bone loss as frequent pregnancies, long lactation period, early menopause, hysterectomy and ovarioectomy, untreated gynecological diseases have been discovered.