

impact on the features of cell apoptosis [3].

The degree of activity of inducible NO-synthase is estimated by the intensity of the brown staining in immunohistochemical detection. We have found that in the papillary dermis with frostbite in cold injury dor-eaktivnom period the color intensity of inducible NO-synthase is increased, which indicates the severity of inflammation in the papillary layer. In the groups treated with dihydroquercetin cryoprotective purpose staining intensity increases after frostbite less pronounced, particularly when the drug topically, indicating that the anti-inflammatory action dihydroquercetin, which is most pronounced when it is applied locally.

Thus, these data support the use of DHQ locally, where there is a visible effect in the cryoprotective dor-eaktivny period.

Conclusions

1. When applied topically Dihydroquercetin manage to reduce the level of structural damage of keratinocytes, reduce reactive effects from dermal microvasculature. For oral use of the drug positive effects are mild.

2. The effect on the connective tissue and microvasculature of the dermis is more significant when taken orally.

Literature

1. Babkin V.A., Ostroukhova L.A., Markov Yu., Ivanova S.Z., Onuchina N.A., Babkin D.V. Biologically active extractives of larch wood // Chemistry for sustainable development. 2001. №3.

2. Dorovskih V.A., Borodin E.A., Tseluyko S.S., The antioxidants in the prevention and korrektsii cold stress. Blagoveshchensk: AGMA. 2001. 183 p.

3. Myadelets O.D., Adaskevich V.P., Morfofunkcionalnaja dermatology. Moscow 2006. P. 655-656.

4. Nozdrin V.I., Barashkova S.A., Semchenko V.V. Leather and its derivatives. Omsk. Eagle 2005. 7-24.

5. Teselkin Y.O., Zhambalova B.A., Babenkova I.V. and others. The antioxidant properties of DHQ Tutorial "Biophysics" in 1996. T. 41, no. 3, pp 620 - 624.

6. Gnaiger E., Kuznetsov A. V., Rieger O., Amberger A., Fuchs A., Stadlmann S., Eberl T., Margreiter R. Mitochondrial defects by intracellular calcium overload versus endothelial coldischaemia/reperfusion injury // Transplant International. 2000. T. 13. N.7. P. 555-557.

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PECULIARITIES OF THE PERIOD OF PREGNANCY AND CHILDBIRTH FOR WOMEN WITH HYSTEROMYOMA

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Hysteromyoma is one of the most actual gynecological problems because of the high prevalence and the "rejuvenation" of the disease, as well as of the negative influence that this pathology exerts on female reproductive functions particularly on the pregnancy and childbirth. The increasing number of patients of fertile age with hysteromyoma, a growing modern tendency to planning the first pregnancy in the late reproductive age after the education and formation of a professional career increasingly confront gynecologists to the problem of conducting the pregnancy with hysteromyoma. The frequency of uterine myoma ranges from 24 up to 50% according to different authors. The tendency to increasing hysteromyoma frequency can be caused, on the one hand, by diagnostic improvement, and on the other - by the prevalence of "aggressive" obstetric and gynecologic surgery (caesarean section, abortion, hysteroscopy, laparoscopy, hysterosalpingography, biopsy and cervical coagulation, diagnostic curettage and removing of the intrauterine device, etc.), and inflammatory diseases of the genitals transmitted sexually. The aim of our work is to investigate clinical and anamnestic characteristics of the course of pregnancy and childbirth for women with hysteromyoma.

We conducted an analysis of the 64 childbirth case histories of women with hysteromyoma. The median age was $33 \pm 4,4$ years old. 21.7% of women suffers from this disease at the age of 20-29 years old, 79.7% of women - at the age of 30 years old or more, that confirms a high risk of hysteromyoma in this age group. We have found that hysteromyoma occur quite frequently in nulliparous 42.2%, 57.8% in multiparous. 87.5% of women had concomitant extragenital pathology. Quite often pregnancy of women with hysteromyoma is accompanied by anemia. In our research in 35.9% of the cases mild anemia was revealed.

In evaluation of the forecast of pregnancy an importance is given to complicated gynecological anamnesis that 65.6% of women had. In 45.3% of cases of cervical erosion is detected, 9.4% of women had ovarian cysts, 7.8% of women had an endometritis. 6.3% of women had infertility which is a frequent complication of uterine myoma. Threat of miscarriage in the different stages of gestation refers to features of pregnancy when it is combined with a hysteromyoma. In the first trimester, it occurs in 35.9%, in the second trimester - 41% and in the third trimester - 23% of women.

Sizes of the myoma nodes have a direct impact on fetal growth and development. Thus in the literature

there are described the cases of children birth with torticollis and cranial deformation apparently caused by the pressure of myoma. In our research the sizes of myoma nodes were from 8 to 93 mm in diameter. As a rule the larger the sizes of myoma are, the higher the probability of premature birth is. Myoma's location and the presence of its contact with the placenta are important. The large size of myoma node, its low localization, the presence of multiple nodes of the uterus and the attachment of the placenta in the projection of myoma are the main risk factors for placental insufficiency. One of the leading causes of placental insufficiency among women with hysteromyoma are hemodynamic disturbances in the system of "mother-placenta-fetus", in which placental blood flow is reduced by almost half due to inadequate intake of blood and difficulty of its outflow from intervillous space. It was found that for every second pregnant the chronic placental insufficiency was diagnosed, which was spent in the form of compensated and was most often seen with chronic fetal hypoxia, in 3.7% of cases intrauterine fetal growth retardation has been diagnosed.

According to the literature childbirth among pregnant women with hysteromyoma occur with complications. One of the most important factors that affect the outcome of pregnancy is the period of delivery, and the higher it is, the more favorable the prognosis is for a newborn, as well as for women. Delivery in time was among 92% of women. However, there is quite a high incidence of premature birth -7.8%. Complications of pregnancy and childbirth require strictly differentiated approach to the management of pregnant women with hysteromyoma and define individual obstetric tactics in each particular case. Also all risk factors from hysteromyoma are taken into account. As a rule among women with a hysteromyoma with low risk childbirth conducted by vaginal route. In patients with high risk factors delivery by Caesarean section is preferable.

Maintaining of vaginal delivery is noted in 52% of cases. Uncomplicated delivery, no bleeding, hemodynamic stability of puerperal allows to limit the observation of the course of the postpartum period. The average blood loss was 179,7ml. The pathological blood loss (400 ml) was observed in 1 case, it cause was the defect of placenta and manual control of the uterine cavity with subsequent breach of contractile uterine fibroids on the background of hysteromyoma.

In complicated pregnancy delivery was carried out by Caesarean section. The indications were the mother causes: multiple uterine myoma - 11.1%, the scar on the uterus -52%, placenta previa - 11.1%, cephalopelvic disproportion - 7.4%, the pathological preliminary period -3.7%. The causes on the part of the fetus were: acute fetal hypoxia - in 3 cases and the situs transversus of the fetus - in 1 case.

Caesarean section in the presence of hysteromyoma in some cases ends by extending the scope of surgical intervention. First of all it concerns the decision on the need for myomectomy. With relatively the apparent simplicity of execution myomectomy may be accompanied by severe complications. Myoma node is well vascularized and myomectomy may be accompanied by bleeding and difficulty of hemostasis. In our research conservative myomectomy was performed only in one case in finding the site in the section on the uterus. At a birth the average birth weight was $3334 \pm 243g$. Most of the newborns were born in a satisfactory condition.

Summarizing the research we made the following conclusions:

1. Women with hysteromyoma need pregravid preparation, and further upon the occurrence of pregnancy should be of high risk group for a differentiated approach in the management of pregnancy and childbirth.
2. Monitoring of pregnancy from early terms, the survey with using of modern methods, timely correction of violations contribute to reducing of the incidence of complications during pregnancy and childbirth, as well as the reduction of maternal and perinatal morbidity.

Literature

1. Obstetric tactics in the management of pregnant women with uterine myoma / Logutova L.S., Buyanova S.N., Levashova I.I. et al. // Vestn. Rus. Assoc. obstetrics. gynecologists. 1999. - No 3. - P. 50-53.
2. Baev O.R. Uterine rupture in modern obstetrics. // Questions of Gynecology., Obstetrics and perinat. - 2005. - T. 4. - No 3. - P. 83-88.
3. A differentiated approach to replenish blood loss during cesarean section and myomectomy. Text. / Semenova O.V., Shmakov G.S., Abubakirova A.M. [et al.] // Problems of pregnancy. 2000. - No 1. - P. 73 -77.
4. Korsak V.S., Shcherbina L.A., Shelaeva E.V. Complete uterine rupture during pregnancy after laparoscopic myomectomy (case report). // Journal of obstetrics and gynecological diseases. - 2005.- Issue 2 - T. LIV. - P. 108-112.
5. Kulakov V.I. Myomectomy and pregnancy. Text. / Kulakov V.I., Shmakov G.S. M. : MEDpress - inform, 2001. - 344 p.
6. Sidorova I.S. Uterine fibroids (modern aspects of the etiology, pathogenesis, classification and prevention). In book: uterine fibroids. Edited by Sidorova I.S. - M. : MIA, 2003, P. 5-66.
7. Management of pregnancy in women with centrapital growth of large fibroids. Text. / Botwin M.A., Pobedinsky N.M., Lipman A.D. et al. // Obstetrician and Gynecology. 2004. - № 1. - P.24 - 27.
8. Tskhai V.B. To the question of the admissibility of the conservative myomectomy during cesarean section. Text. / Tskhai V.B., Ermoshkin O.A. // Vestn. Perinatology, Obstetrics and Gynecology - 129. Krasnoyarsk,

2003. Vol. 10. - P. 306 - 314.

9. De Carolis S., Fatigante G., Ferrazzani S., Trivellini C., De Santis L., Mancuso S., and Caruso A. Uterine myomectomy in pregnant women. // *Fetal Diagn Ther*, 2001.; 16 (2): 116-9.

10. Walker C. L., Cesen-Cummings K., Houle C., Baird D., Barrett J. C., Davis B. Protective effect of pregnancy for development of uterine leiomyoma. // *Carcinogenesis*, 2001, Vol. 22, No. 12, P. 2049-2052.

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LOCOMOTIVE ACTIVITY AND WEIGHT

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Abstract The aim of the study is to analyze interrelation of the Amur region women's weights to their levels of locomotive activity and age.

Key words: physical activity, weight, blood pressure.

There is an opinion, that it is typical for a mature person to gain weight. However, it is deeply flawed opinion because person's weight during the whole life should remain at about the same level as it has established in adolescence. Young people and teenagers do not usually eat less than adults, but they are in good shape because the majority of them are active and do sports or have other physical activities. A prevalent cause of overweight among middle-aged people is loss of physical activity. What is more, it can be explained by the fact that a person's appetite remains the same, even when the person spends significantly less calories. The body has no way to get rid of surplus and gradually accumulates it as fat. As a result, there is the deposition of excess weight, provoked by sedentary lifestyle.

The obesity not only doesn't make a man more attractive, but also has a harmful effect on his health and general well-being. Physical inactivity damages the normal activity of the body, people with overweight suffer from physical and mental stress and they are more susceptible to various diseases. The most favorable way out of this situation is to maintain an active lifestyle, which contributes to the normalization of the body weight. According to the index of Quetelet the optimum weight is 350-400 g of the body weight per one centimeter of man's growth, 325-375 g for one centimeter of woman's growth.

One of the important conditions for the maintenance of normal weight is balancing the incoming energy with its spending. Moreover, the use of moderate physical activity is inherent for the organism. Physical activity is essential for the metabolism. During brief physical activity consumption of the energy, which is drawn primary upon ATP and then from glucose, is rapidly increasing in the muscles. During the long muscular work the use of fatty acids increases.

In order to maintain metabolism and muscle tone at an acceptable level, there are effective physical exercises from morning hygienic gymnastics, jogging, cycling till popular nowadays fitness, pilates, yoga practices and others forms of activity.

It is advisable to have at least a part of the motor activity with the emotional basis. During any collective physical exercises the larger amount of catecholamines is giving out, than during the monotonous physical exercises (catecholamines accelerate the combustion of reserved fat and glycogen). Isometric exercises aren't suitable for fat people (the muscle is strained, but it doesn't contract rhythmically), because muscle mass increases, but body weight reduces slightly.

We have conducted the research, which has carried out the interrelation of physical activity to weight and age, additionally, we have noted the state of the cardiovascular system among people of different age categories.

Young age participant's indicators:

1. girl, 19 years old: 169cm, 49kg, blood pressure: 87/57, 12.450 steps per day;
2. girl, 22 years old: 169cm, 56kg, blood pressure 100/65, 11,895 steps a day;

Middle age participant's indicators:

1. woman, 39 years old: 170cm, 80kg, blood pressure: 120/80, 5187 steps a day;

Old age participant's indicators:

1. woman, 59 years old: 160cm, 72kg, blood pressure: 90/66, 4120 steps a day;
2. woman, 64 years old, 164cm, 95kg, blood pressure: 140/90, 3980 steps a day.

It is important to highlight a couple of issues, which can not be ignored during any physical exercises. Before starting a training, you should have time for a preliminary «warming» of the whole body with the help of some simple exercises. Pay attention to the strengthening of muscles and ligaments of the joints, muscles of the abdomen, back and chest. All exercises should be combined with the correct breathing: inhale slowly and