HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

UDC: 618.11-008.64

CLINICAL CHARACTERISTICS OF PATIENTS WITH PREMATURE OVARIAN FAILURE

Ibrakhimova N.O., Bekbaulieva G.N.
Tashkent State Medical University, Uzbekistan
Doi: https://doi.org/10.5281/zenodo.22114286

Abstract: Premature ovarian failure (POF) is a symptom complex characterized by secondary amenorrhea. The causes of POF are heterogeneous and may include genetic, enzymatic, autoimmune, infectious-toxic, iatrogenic, and psychological factors, defects in gonadotropin structures, and a combination of these. Despite the recent descriptions of various candidate genes underlying POF, the genetic basis for this disorder remains unclear.

Key words: menopause , ovarian failure

Although menopause is a natural stage of ontogenesis, it does not always proceed physiologically. According to modern authors [1], varying degrees of severity of pathological menopause occur in 40-70% of women, with 10-15% of patients suffering from severe forms of the disease.

It is known that sex hormones exert a regulatory effect on various organs and tissues of the female body, binding to specific receptors, which, according to numerous studies [8], in addition to the genital area, are also localized in the cells of the brain, heart and arteries, urogenital tract and mammary glands, bone tissue, etc. This explains the variety of disorders that develop as a result of sex steroid deficiency in pathological menopause and post-ovariectomy syndrome. Research in recent years has shown that in hereditary hemochromatosis, caused by a mutation in the HFE gene mapped to chromosome 6, iron deposition in the parenchymal organs leads to the destruction of cellular structures due to the accelerated process of apoptosis in them [3].

Purpose of the study. To determine the genesis of POI and develop early prognostic criteria for the development of the disease.

Material and research methods. Clinical studies were conducted on 70 women of childbearing age (40.4 ± 0.2 years) complaining of menopausal disorders. Clinical and laboratory examinations of these patients revealed no contraindications for HRT. Inclusion criteria included menopause for at least 12 months, complaints of pathological menopause (hot flashes), and informed consent to take phytoestrogens. The exclusion criteria were arterial hypertension with a blood pressure level of 180/110 mm Hg and higher; cerebrovascular accident (including a history); severe liver disease with impaired liver function; prescription of hormonal therapy; intake of psychotropic drugs, drugs for weight loss. The examination was conducted using a questionnaire, which included: general data (age, marital status, education, profession, occupation, work characteristics, physical activity, general medical history, medical history, obstetric and gynecological history); tests for eating behavior (emotional, external, restrictive), visual analogue scales. All patients were examined by a therapist, neurologist, and gynecologist.

Research results and discussion. The average age of the examined women was 49.6±5.2 years, the average duration of menopause was 2.3±0.4 years. A clinical and laboratory examination of 70 women with POF (mean age 32.8±1.5 years) was conducted. A study of the family history showed that 67.14% of patients had an adverse heredity and had suffered from multiple diseases in

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

the past. In maternal relatives, 20% of our patients were noted to have various menstrual rhythm disorders, and in 14.2% of cases there were indications of early ovarian failure. When studying the premorbid background of patients, a high infection index was noted in 44.2% of patients with POF. Epidemic mumps had been suffered by 62.8% of the examined patients, rubella - 44.3%, compared to population data of 32.3 and 12.6%, respectively. Among the past extragenital diseases, a significant frequency (27.9%) of autoimmune diseases is noteworthy. It should be noted that the frequency of the identified pathology of autoimmune genesis was determined taking into account the examination of 43 patients of the prospective group. During the previous examination, patients of the retrospective group were not asked special questions about the presence of autoimmune diseases. In 43 patients (7%), ovarian insufficiency syndrome was combined with rheumatoid arthritis, in 5 (11.6%) - with autoimmune thyroiditis, in 1 (2.3%) - with myasthenia gravis, in 1 (2.3%) - with eosinophilic hemorrhagic granulomatous vasculitis, in 2 (4.6%) - with vitiligo. Thus, we identified a frequent combination of POF with autoimmune diseases of both endocrine and non-hormonal genesis. Most frequently (in 36.4% of cases), these combinations are presented in patients with subsequently proven autoimmune genesis of POF. Gynecological diseases were noted in 61 (87.1%) patients. Recurrent genital candidiasis was the most common - in 32 (45.7%) patients. Analysis of the establishment of menstrual function in patients with POF showed that regular menstruation was established with menarche in 43 patients (61.4%). Oligomenorrhea with menarche was noted in 9 (12.9%) patients, in the rest the menstrual rhythm was disturbed at different age periods. In 65 (92.8%) patients, menarche was within the norm (13.0 ± 0.3 years). Menarche was late in 5 (7.1%) women. The examined patients had previously had 88 pregnancies, 28 of which ended in childbirth, 54 - induced abortions, 5 - spontaneous miscarriages, 1 - premature birth. Disorders of the reproductive function were noted in 44 (62.8%) patients, of which primary infertility was in 36 (51.4%), secondary infertility in 8 (11.4%). This indicates preserved ovarian reserve before the onset of the underlying disease. The average age at which menstrual cycle disturbances were noted was 26.72 ± 1.06 years, the age of ovarian function shutdown was 28.2 ± 1.02 years. The causes leading to POF in the examined patients were stress factors in 21 (30.0%) patients. Significant physical and mental stress were detected less frequently—in 4 patients (5.7%), while 4 patients (5.7%) indicated taking estrogen-progestogen drugs for contraception and treatment. Climate change and the onset of sexual activity, as presumed causes that provoked the onset of the disease, were identified in 5 women (7.1%). However, in the overwhelming majority of 36 (51.4%) examined women, the etiological cause of POF was not clarified, therefore, one can mainly think of an idiopathic form of the disease. In 60 patients (85.8%), the onset of the disease was manifested by a violation of the regularity of the menstrual cycle in the form of oligomenorrhea. Sudden cessation of menstruation was noted in 10 patients (14.2%). Against the background of the cessation of menstruation, early symptoms of deficiency of female sex hormones in the form of vasomotor and emotional vegetative manifestations were noted in 48 and 77.5%, respectively. Moreover, their severity according to the Kupperman index (15.2 ± 1.8 points) and according to the quality of life assessment using the MENQOL questionnaire (vasomotor symptoms 8.2 ± 3.8 points, physical condition 37.5 ± 8.38 points, sexual sphere 8.1 ± 3.48 points, psychological state 25.6 ± 6.88 points) indicated a moderately severe estrogen deficiency. The relatively minor clinical manifestations of changes in hormonal homeostasis can be explained by the fact that, unlike women in the period of physiological menopause, our patients have not yet experienced age-related changes in the structures of the hypothalamic and limbic systems.

Conclusions. Thus, premature ovarian failure is a multifactorial disorder. Major diagnostic features confirming the autoimmune origin of ovarian failure were identified in 25.5% of patients.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

Intermediate premature ovarian failure (likely of autoimmune origin) was diagnosed in 67.5% of cases; idiopathic premature ovarian failure was confirmed in 7.0% of patients. Androgen deficiency (decreased testosterone levels to 0.8±0.1 pmol/L) was observed in 55.7% of patients with premature ovarian failure, despite the normal FOT, LH, and estradiol ratios typical for this disorder. Cortisol and dehydroepiandrosterone sulfate levels remained within normal limits, indicating preserved adrenal function in patients with secondary hypergonadotropic amenorrhea. Hypothyroidism (TSH 7.34+1.1 mIU/L) was detected in 23.3% of patients, 3-4 times more frequently than the general population. Manifest thyroid dysfunction was diagnosed in 16.3% of patients, and subclinical thyroid dysfunction in 7.0%.

References:

1. Malichenko S.B., Volkova V.A., Khalidova K.K. Systemic changes in menopause: the role of calcium and vitamin D deficiency in the formation of postmenopausal symptom complex // Consilium Medicum Ukraina. 20 2 1. No. 1.
2. Tabeeva G.I. Assessment of androgen status in premature ovarian failure and differential
3. cialized approach to treatment // Gynecology. 20 2 2. No. 4. P. 33-38.
4. Baranov, V.S. Cytogenetics of embryonic development. Text. / V.S.Baranov, T.V.Kuznetsova St. Petersburg.// N-L, 20 1 7. - 640 p. - Bibliographic: pp. 23-373.
5. Bogdanova, E.A. Gynecology of children and adolescents Text. / E.A. Bogdanova. -M.//MIA, 2018.- 330 p. Bibliography: p. 175 - 260.
6. Boyarsky, K. Yu. Clinical significance of tests for determining ovarian reserve in the treatment of infertility // Abstract of Cand. Sci. (Medicine) Dissertation. - St. Petersburg, 2019.-e. 26. 5.
7. Di Pasquale E., Beck-Peccoz P., Persani L. Hypergonadotropic ovarian failure associated with an inherited mutation of human bone morphogenetic protein-15 (BMP15) gene. Am J Hum Genet 2004; 75: 106–111.