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STUDY OF RISK FACTORS FOR PREMATURE MENOPAUSE IN BANDAR ABBAS

ZOHREH SABERI

ABSTRACT

The aim of this study was to evaluate risk factors for premature menopause in Bandar Abbas, in this study case - control in mid-April from March 79 to 83 was conducted for four years,first, a questionnaire containing variables such as age, education, race, weight, date of last menstrual period, the number and type of birth, age at menarche, menstrual cycle length and long, dark history of genital surgery, autoimmune diseases, endocrine, diabetes I, chemotherapy - radiotherapy, smoking, severe stress, irregular menstrual periods were given to all 40-18-year-old woman diagnosed with early menopause due to the cessation of menstruation for at least 6 months and the increase of FSH and LH and control group women At the same age and had normal menstrual cycle history. The serum samples were collected from all the patients and control and was sent to the laboratory to perform experiments LH, FSH, ANA, ACLA-IgM, ACLA-IgG. After statistical analysis descriptive method and statistical distributions T, x2 in two groups and calculated the relative risk estimates and the results suggest that in women with risk factors associated with more care, drug therapy before menopause and by the relevant tests for the diagnosis of autoimmune disease premature ovarian failure and premature menopause, early menopause for the diagnosis of autoimmune to prevent complications of early menopause.

Keywords: Early menopause, autoimmune, risk factors

INTRODUCTION

Premature Ovarian is called failure to menstruation under 40. This was due to the absence of follicles in the ovaries because most patients have had levels higher than 40MIU / ML, these patients sometimes experience menstrual period and pregnancy (Hammond, 1999).

In premature ovarian failure due to young age and unexpectedness of this phenomenon, psychological support seems necessary as well as identifying risk factors

for premature ovarian failure and trying to eliminate risk factors such as: natural causes, endocrine, chemotherapy or surgery are perhaps necessary (Hurd, 2002).

1.1 The causes of premature ovarian failure: POF is a heterogeneous disorder with multiple causes. These causes can be divided into five categories: genetic causes: autoimmune, metabolic, environmental, surgery.

Genetic disorders include x-chromosome abnormalities that can lead to premature loss of the follicles. This anomaly is seen in the short arm and the long arms of chromosomes x.

Autoimmune diseases: ovarian failure in women usually have several gland failure (ployglandular), including thyroiditis, Haypvadrnalysm, hypoparathyroidism, etc. Antibodies against the ovarian tissuehave found in these women, but it certainly does not prove that they cause ovarian failure.

Metabolic diseases such as galactosemia (galactose-1-phosphate deficiency due to Yuridia - transferase) that high levels of galactoseare toxic for oocytes, but the cause is unknown.

Environmental factors such as antineoplastic drugs including alkylating agents in more than 50% of patients are induced amenorrhea. Young women are affected more than older women. Use cGy 800 in 2 days can lead to permanent ovarian failure cause (Hammond, 1999).

1.2 Example of Laboratory Findings:

After the menopause, FSH increases 10 to 20 times the amount of LH almost increases three times that 1 to 3 years after menopause, both increase to maximum level.FSH levels are higher than the LH levels for LH and FSH from the bloodstream purified faster. The initial half-life of LH is 20 minutes and half-life of FSH is 3 to 4 hours. Another reason is that there is no proprietary peptide for negative feedback like Inhibin for LH (Speroff, 1999).

Follicle Stimulating Hormone (FSH):

The most consistent findings in menopause is the increase in serum FSH. Pre-menopause FSH levels in the third day of ovarian natural cycle is IU / L 10-5, and in the women in the perimenopausal, FSH levels rise IU / L 25-10 that shows the relative resistance of ovarian inhibin produced by ovarian follicles resulting in reduced or normal levels of estradiol, and FSH level over IU / L 40 are consistent with a complete cessation of ovarian function (amenorrhea) (Hurd, 2002).

Luteinizing Hormone (LH):

Before menopause, the LH levels are usually in the range IU / L 20-5, and during the

menopause change, it changes the same as FSH. As amenorrhea, theproduct ofpituitary adenoma gonadotropin is rare, women, especially young patients who are suffering from the loss of ovarian function, the levels of LH and FSH should be measured (Hurd, 2002).

Estrogen:

Premenopausal estradiol level is in the range of 50 to 300 pg ml. However, even with cut ovarian estradiol levels may still be in the range of 100 pg per milliliter, due to the ability of peripheral tissues (muscle and adipose tissue) in aromatizing ovarian and adrenal androgens (androstenedione) to estrogens. Therefore, higher levels of circulating estrogen in obese women are at increased risk of endometrial cancer. The higher levels of estrogen in obese women may protect them against menopause does not seem to some extent protect the individual against skeletal problems. In contrast, lean women have lower estrogen levels and increased risk of osteoporosis. (Hurd, 2002).

Progesterone:

Before menopause, progesterone protects endometrium over-stimulation of estrogen through regulation estrogen receptors. After menopause, progesterone production stops and the affected organs such as breast and

endometrium hyperplasia and endometrial cancer risk is increased. Because the amount of estrogen in pre-menopause and post it can still stimulate the endometrium. (Hurd, 2002)

1.1 Clinical Findings:

☐ Amenorrhea: It is characterized by periodic cessation of ovarian function, prolonged amenorrhea.

☐ Flashes: The classic symptoms of estrogen deficiency is associated with. With courses like redness, sweating and a feeling of warmth that is often associated with palpitations and a feeling of anxiety and is sometimes followed by chills. In physiological gonadotropin pulses released if congestion on the rise (GNRH) of the thalamus, which may increase the frequency and severity of it (Hurd, 2002).

☐ Distress sleep during menopause developments that insomnia is related to estrogen deficiency that may be improved with hormonal therapy. (Hurd, 2002)

☐ Vaginal and urinary tract changes: Within 5-4 years after menopause, one third of women who have taken estrogen in the signs of atrophy are completed. Vaginal symptoms including dryness, dyspareunia (painful intercourse) and vaginal infection is frequent that estrogen is reversible with treatment.

☐ Urinary tract symptoms including dysuria, urgency urinary incontinence and recurrent urinary tract infections.

☐ The central nervous system: women around menopause often have problems such as poor concentration and short term memory due to aging alone or lack of sleep are brief flashes with attacks. The direct effects of estrogen replacement therapy on the brain and it causes short-term memory and long-term correction (Hurd, 2002).

☐ Alzheimer: a process of slow and progressive loss of mental function is the destruction of neurons. Estrogen replacement therapy reduced the risk of Alzheimer's (Hammond, 1999).

☐ Heart disease - CVD: The lifetime risk for men and women will rise, although the risk of death from coronary artery disease, at least in men, 3 women before menopause; but this risk is greatly increased in women after menopause. One of the most common and most treatable risk factors after menopause is Hypoestrogenism. Women with estrogen replacement therapy after menopause than women who do not treat myocardial infarction or stroke risk is less than half.

☐ Osteoporosis: Osteoporosis is defined as a decrease in bone quality.

☐ Colon cancer: The third most common cancer and cause of cancer death increased in women after age 40, and it is maximized 60 to 75 years. It is more common in women than men, and in recent studies can be treated with estrogen (Hammond, 1999).

The whole range of emotions related to hormonal changes and physical, is characteristic of menopause including:

- The loss of fertility: when children and foster children, are the main source of identity and self-esteem, loss of fertility may lead to severe distress (Hurd, 2002).

- The loss of youth: the impact of the matter is that a woman is treated for his personal appearance, and this is leading to anxiety or depression.

- Skin changes: accelerating obvious skin changes is a concern for many women. Estrogen deficiency probably plays an important role, and estrogen therapy may be helpful in the prevention and correction of dermal collagen decreases with increasing age (Hurd, 2002).

- Depression is more common in the per-menopausal period and the most common medical disorders in women and older patients. But researchers have not been able to find a link between depression and hormonal status. Hormonal status may be

more of a psychological factor - social connection.

- Anxiety and irritability: the increase in the time around menopause estrogen deficiency condition, with psychological factors - linked to social.

The symptoms are a major part of the climacteric syndrome.

- Decreased libido, changes in vaginal menopause can contribute in reducing sexual gratification. Almost one-third of postmenopausal women without estrogen therapy, vaginal atrophy.

Discomfort caused by lack slippery vagina, leading to dyspareunia. Vaginal atrophy oral or vaginal estrogen therapy, vaginal dryness can be treated with vaginal Lubrikantai (Hurd, 2002).

- Abnormal bleeding in more than a third of all women around menopause occurred often without ovulation cycle, with a gradual decline in the number of follicles with normal function and a gradual increase in FSH level early follicular phase, is associated.

Abnormal bleeding can be due to unexpected pregnancy: Pre-malignant lesions such as endometrial hyperplasia is more common in menopause, and the menopausal women with abnormal uterine bleeding due to their malignant condition should be taken under endometrial biopsy (Hurd, 2002).

1.1 Treatment:

Hormone therapy causes to stop signs, improve muscle performance, sense of well-being, reduce heart disease - cardiovascular and vasomotor, and reduce non-genital cancer. The women who receive estrogen at menopause. An average of 4 years or more of women not receiving hormones are live. (Asprvf, 1999) Health hazards due to lack of estrogen replacement therapy in postmenopausal women without contraindications should be done (Hurd, 2002).

Indications and contraindications table of estrogen replacement therapy(2)	
Contraindications	**Indications**
Absolute:	**Menopause**
Gestation	**Flushing**
Uterine bleeding without diagnosis	**Vaginal atrophy**
Active thrombophlebitis	**Urinary symptoms**
Current disease gallbladder	**High risk to Osteoporosis**
Liver disease	**family history**
Relative	**Smoking**
History of breast cancer	**Low body weight**
A history of recurrent thrombophlebitis or illness	**Radiographic evidence of high risk for cardiovascular disease**
Thrombolic	**Myocardial infarction or angina**

	high blood pressure
	family history
	Smoking

Premature ovarian failure depending on the patient's desire for pregnancy. Some women, especially women with ovarian antibodies may be improved after combined therapy of estrogen and progesterone.

  If the patient's unwillingness to pregnancy, estrogen replacement therapy is indicated (ERT / HRT). In patients with primary amenorrhea, treatment should start with low-dose estrogen and dose should be gradually increased to stop maturity, secondary sexual characteristics be completed before epiphyses be closed by estrogene, the patient would grow. This applies to women with cytogenic abnormalities (e.g. Turner syndrome).

LITERATURE

In a study on women's health in Massachusetts from 2570 women, mean age of menopause was 3.51 and smoking alone can create a standard deviation of 5.1 years at the age of menopause, as well as the length, number and type of consumer tobacco was reported to be effective (Michanoiz, 1996, Long cap, 1998, Whelan, 1999, Stanford, 1998), during studies show that girls whose mothers before age 46 are at risk of early menopause were

postmenopausal. (Torgerson, 1997). (Hammond, 1999).Cramer and his colleagues reported in 1996, early age at first menstruation and menopause is premature (Cramer, 1996), but other studies did not affect early menarche to menopause (live, 1994, Whelan, 1990, Brvmbrgr, 1997). A study on 15,253 women between the years 1997-1999 Italian cross-sectional study was conducted early menopause was not a single woman or birth (nulliparous) and women throughout life, have irregular menstrual periods or family history of early menopause they go through menopause earlier, but the association between age at menarche (menarche), use of oral contraceptives and smoking with premature menopause were reported (Parazini, 2003).In a study conducted in 2000 by Dorman and his colleagues reported that women with diabetes type I, nulliparous, irregular menstrual periods before age 30 and women who go through menopause earlier, one of the fallopian tubes are removed (Dorman, 2001). Several studies in autoimmune disease affecting premature ovarian failure and the presence of autoantibodies in serum know these people against known ovaries

(Pkonn, 1998; Williamson, 1980). In a study conducted in 1991 by weissenbruchvax and his role of IgG antibodies against FSH receptors in the ovaries is effective in the incidence of early menopause (Van Vysnbrvch, 1991). In a study in 2001 also by chernishov and colleagues on 68 women with premature ovarian failure, case-control study was conducted. High levels of anti-cardiolipin antibodies of IgM type are affecting the incidence of premature menopause was also reported high levels of IgM and IgG in postmenopausal women (Chrnisho, 2001).

Given the importance of this issue, this paper examines the following assumptions:

Hypothesis 1: early menopause is more in women with a history of surgical procedures on the genital (removal of the ovaries, uterus and fallopian tubes, etc.).

Hypothesis 2: early menopause is more in women who have an autoimmune disease.

Hypothesis 3: early menopause is more in women who have a higher metabolic diseases.

Hypothesis 4: Early menopause is more in women with type I diabetes.

Hypothesis 5: Early menopause is more in women with a history of cancer, chemotherapy, and radiotherapyfor treatment of cancer.

Hypothesis 6: Early menopause is more in women who consume more cigarettes.

Hypothesis 7: Early menopause is more in women who experience early menopause in female first-degree relatives (mother, sister).

Hypothesis 8: Early menopause is more in women with a history of severe stress in life (flood, earthquake, war) or hospitalization in the psychiatric ward or use antidepressants drugs.

Hypothesis 9: Early menopause is more in women with a history of irregular menstrual periods lasting (long - term) during life.

Hypothesis 10: Early menopause in women produced more parks.

Hypothesis 11: menopause is more in women with lower menstrual age.

Hypothesis 12: Early menopause is more in women with positive IgG.ACLA tests.

Hypothesis 13: Early menopause is more is more in women with positive IgM-ACLA tests.

Hypothesis 14: Early menopause is more in women with more positive ANA test.

METHODOLOGY

This is a case - control (Case-control) in the period March 2000 to mid-April 2004 period is four years. Thus, according to sampling based on non-probabilityand easy sampling: All patients referred to medical centers of Shariati hospital, private clinics, and Shahid

M Mohammadi hospital during the 4 years and diagnosis of premature menopause due to the cessation of menstruation for at least 6 months and the increase of FSH, LH has been chosen, and questionnaires have already been developed and within it the risk factors that put patients and their contributions also were filled in this questionnaire. Then women 18-40 years with normal menstrual cycle were selected as the control group and the questionnaires were filled by the same group.

The serum samples were collected from all patients diagnosed with early menopause and with the form of tests LH, ANA, FBS, IgG- ACLA, IgM-ACLA FSH, was sent to the laboratory. The serum samples from all the control for the experiments were collected and sent to a laboratory. In order to prove or disprove hypotheses 1 to 14 were used descriptive method. The results of case-control and X2 were analyzed using t-distribution and in relation to various risk factors, the relative risk estimate was calculated.Testing of LH, FSH order to confirm the diagnosis of premature ovarian failure cases and ensure the normal activity of the ovaries in the control group. Also, FBS test for the diagnosis of diabetes in women who had a history of the disease and diagnosis in women who did not mentioned

this experience, ANA, IgG-ACLA, IgM-ACLA tests also for the diagnosis of autoimmune diseases in women who had a history of autoimmune disease, and diagnosis in women who did not mention the history were in the case and control groups.

Relevant Measurement Tests:

A female hormones FSH and LH measurement method using Chemilumincscence by Diasorin kit.

In this way 1) patient samples (Sample) and materials (Reagent) are poured to Reaction module dumped device.

2) The resulting compound transferred to Incubator 37 ° C for 10 minutes.

3) To release the bond component of the free form should be rinsed

4) Combination plier phytomulti device to be transferred.

5) Initiator solution (Stater) is added.

6. The optical density is measured.

In this way, according to the last date of menstruation (LMP), follicular phase (1 to 14 days) or luteal phase (14 to 28 days) or the phase of pre-evolution (2 ± 14 days) or menopausal phase amount of FSH, LH are studied.

FSH (MIU/ML):

Folicular: 3.5-9.2

Luctal: 1.7-5.6

Menopause: 13.9-103.1

LH (MIU/ML):

Folicular: 1.9-9.2

Luteal: 1.3-10.8

Menopause: 15.4-53.3

Measuring ANA, IgG- ACLA, IgM-ACLA using ELISA by GENESIS kit.

ELISA method includes 8 steps:

1) Antigen incubated in saline into the tube and some of it is absorbed by the inner surface of the tube.

2. CEA is rinsed.

3. Specific antibody is added to bind to antigen.

4. Disconnected proteins are washed.

5. Nigand is added for binding to the antibody.

6. Rinse for a ligand attached to the antibody.

7. Colorless chromogen substance as a result of the performance of enzyme-ligand, provides color product.

8. The antibodies tested by examining the color of the final product by measuring optical density is measured using the Elisa Reder. ANA also positive as long as the headline over a thirty-second lead. (50)

In this way, positive ANA and Kardyvlypynhay amounts of IgM, IgG was investigated.

Positive IgG> 11 mg / dl

Positive IgM> 10mg / dl

C) Measurement of fasting blood sugar or FBS has been enzymatically with Hitachi.

RESULTS

3.1 Descriptive Statistics

In the studied population, the average age of the 31/83 ± 6/78 years (minimum age 18 years and maximum 39 years) patients and normal menstruation among women 18-40 years old with 82 women with a mean age of 27/42 ± 5/49 years (minimum 20 years and maximum 39 years) for of the control group were studied.

In the studied population, the average age of early menopause 27/42 ±5/49 years and the most common menopause (43/93%) were between 35 and 39 years old.

3.2 Inferential Statistics

Studying any of the assumptions of the study is as follows:

• 8 patients (19/51%) and 1 (1/22%) of the control group had a history of surgical procedures on the reproductive system and the difference was statistically significant. [P<0.05, OR=19.64 950.0, CI (2.36-163.26)]

Table 1: Frequency distribution of heavy surgery on the genitalia in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
1/22%	1	19/5%	8	Positive heavy surgery
98/78%	81	80/4%	33	Negative heavy surgery
100%	82	100%	41	Total

- 8patients (19/51%) patients and 4 patients (4/88%) of the control group reported a history of autoimmune disease, and this difference was statistically significant. [P<0.05, OR=4.73 950.0, CI (1.33-16.79)]

Table 2: Distribution of a history of autoimmune disease in women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
4/88%	4	19/51%	8	Positive autoimmune disease
95/12%	78	80/49%	33	Negative autoimmune disease
100%	82	100%	41	Total

- 19 cases (46/34%) of the patients and 5 (6/1%) of the control group reported a history of metabolic disorders that this difference was statistically significant. [P<0.05 OR=13.3 950.0CI (4.46-39.68)]

Table 3: Frequency of a history of metabolic disease in women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
6/10%	5	46/34%	19	Positve metabolic disease
93/90%	78	٪ ۵۳/۶۶	22	Negative metabolic disease
100%	82	100%	41	Total

- Three (32/7%) of the patients and 1 (22/1%) of control group suffer type I diabetes. Statistically, significant differences between the two groups is not achieved. [P>0.05 OR=6.39 950.0CI (0.64-63.51)].

Table 4: Distribution of history of type 1 diabetes in studied women

Control		Case		Varaible
Relative frequency	Frequency	Relative frequency	Frequency	
1/22%	1	7/32%	3	Positive type 1 diabetes
98/78%	81	92/68%	38	Negative type 1 diabetes
100%	82	100%	41	Total

People (88/4%) of patients with a history of chemotherapy following cancer treatment and in the control group, no one mentioned this history and this difference was statistically significant (P> 0.05).

Table 5: Frequency of chemotherapy and radiotherapy in women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
2/44%	2	19/51%	8	+ chemotherapy and radiotherapy
97/56%	80	80/49%	31	- chemotherapy and radiotherapy
100%	82	100%	41	Total

• 8 patients (51/19%) and 2 patients (44/2%) of the control group had a history of smoking and the difference was statistically significant.

[P<0.05 OR=9.7 950.0CI (1.95-48.11)

Table 6: Frequency of smoking in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
0%	0	4/88%	2	+ Smoking
100%	82	95/12%	39	- Smoking
100%	82	100%	41	Total

• 13 patients (71/31%) and 1 (22/1%) of the control group positive family history of first degree relatives (mother, sister) noted that, this difference was statistically significant.

[P<0.05 OR=37.61 950.0 CI (4.7-300.68)]

Table 7: Frequency of occurrence of early menopause in first degree relatives of studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
1/22%	1	31/71%	13	occurrence of early menopause in positive first degree relatives
98/78%	81	68/29%	28	occurrence of early menopause in negative first degree relatives
100%	82	100%	41	Total

- 16 patients (39/02%) and 3 (3/66%) of the control group were taking antidepressants stresses of life and that this

difference was statistically significant.
[P<0.05 OR=16.85 950.0CI (4.54-62.62)]

Table 8: Frequency of severe stress in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
3/66%	3	39/02%	16	Positive severe stress
96/43%	79	60/98%	25	Negative severe stress
100%	82	100%	41	Total

- 29 patients (70/73%) and 17 (20/73%) of the control group had a history of irregular menstrual

perpetual life and the difference was statistically significant.
[P<0.05 OR=9.24 950.0CI (3.91-21.81)]

Table 9: Distribution of a history of irregular menarche in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
20/73%	17	70/73%	29	Positive irregular menarche
79/27%	65	29/27%	12	Negative irregular menarche
100%	82	100%	41	Total

- 3 patients (7/32%) and 6 patients (7/32%) of the control group of younger age experienced menarche and that

this difference was not statistically significant.
[P>0.05 OR=1 950.0CI (0.24-4.22)]

Table 10: Frequency of occurrence of early menopause in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
7/32%	6	7/32%	3	occurrence of positive early menopause
92/68%	76	92/68%	38	occurrence of negative early menopause
100%	82	100%	41	Total

• 14 patients (34/15%) and 59 (71/95%) of the control group were nulliparous and the difference was statistically significant. [P<0.05 OR=4.95 950CI (2.21-11.07)]

Table 11: Frequency of the parity in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
71/95%	59	٪ ٣۴/١۵	14	No delivery
28/05%	23	٪۶۵/٨۵	27	Pregnancy≥ 1
100%	82	٪١۰۰	41	Total

• 7 patients (17/07%) and 1 (1/22%) of the control group were with positive test anti-cardiolipinIgG antibodies of the type that this difference was statistically significant. [P<0.05 OR=16.68 950.0 CI (1.98-140.78)]

Table 12: Distribution of ACLA-IgG disorders in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
2/44%	2	14/63%	6	Women with positive IgG
97/56	80	85/37%	35	Women with negative IgG
100%	82	100%	41	Total

•6 patients (14/63%) and 2 patients (2/44%) of the control group were with positive test anti-cardiolipinantibodies of IgM type, this difference was statistically significant. [P<0.05 OR=6.86 950.0 CI (1.32-35.67)]

Table 13: Distribution of ACLA-IgM disorders in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
1/22%	1	17/07%	7	Women positive IgM
98/77%	81	82/93%	34	Women negative IgM
100%	82	100%	41	Total

- 1patient (2/44%) were positive for ANA and in the control group, all were negative for ANA and significant difference between the two groups is not achieved. (P> 0.05.

Table 14: Distribution of the ANA disorders in studied women

Control		Case		Variable
Relative frequency	Frequency	Relative frequency	Frequency	
0%	0	2/44%	1	Women with positive ANA
100%	82	97/56%	40	Women with negative ANA
100%	82	100%	41	Total

CONCLUSION

By studying the risk factors affecting the incidence of early menopause on 41 women diagnosed with early menopause (cases) and 82 women with normal menstrual control in order of priority family history of early menopause, history of surgical procedures on the reproductive system, life stresses, positive IgG - ACLA, metabolic diseases, smoking, a history of irregular menstrual periods, positive IgM-ACLA, null parity, autoimmune diseases. In this study, since the proportion of women with lower age at menarche (9-12 years) were similar in both groups (7/32%).Statistically, significant difference between the two groups is not achieved.In this study, the chance of early menopause in patients with surgical procedures on genital is higher.Estimate the relative risk of early menopause was higher in patients with metabolic abnormalities that suggest an effect of the disease on the ovaries. Although the percentage of patients with type I diabetes group was more than control group, but statistically significant difference between the two groups is not achieved.Given that only two of the patients with a history of chemotherapy - chemotherapy followed by cancer and the control group did not have a record. This difference was not statistically significant.The risk of early menopause was more smoking. The aim of this study was to estimate the relative risk of early menopause in women with severe life stress or antidepressant use was higher.Estimate the relative risk of early menopause in women who have irregular menstrual periods in life has always been higher.Estimate the relative risk of positive IgG and IgM anti

Kardyvlypynhay the early age of menopause has been effective. Given that only one of the study population has a positive ANA and ANA negative control group have all these factors in the incidence of premature menopause was not statistically significant. The study and identification of risk factors for premature menopause and hormone replacement therapy and hormonal treatment with pre-menopausal women who are at risk of early menopause age is high, the effects of menopause on their earlier can be prevented. Anti-cardiolipin IgG and IgM are also prevalent in early postmenopausal women: the possibility of immunological diseases and rheumatologic complications and premature menopause in getting there and suggested Dear experts, research on finding the causes of the increase in the Antibiotic cardiolipin are designed and implemented.And in early postmenopausal women, review ParaknykyIgM- ACLA and IgG-ACLA and ANA tests for the diagnosis of autoimmune diseases in women with autoimmune disease, the amount of LH, FSH is recommended for the diagnosis of premature ovarian failure, if yes to the use of drug therapy to prevent complications is crucial.In this study, although positive ANA, type I diabetes and history of chemotherapy was not statistically significant, it is

proposed to achieve more accurate results of this research in terms of research projects in order to test a wider population ANA, FBS and find Records chemotherapy - chemotherapy, with appropriate funding can be performed.The role of education in improving the lives of postmenopausal women and improve their health is to be the subject of future research.

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