ORIGINAL ARTICLE

EFFECTIVENESS OF HORMONE REPLACEMENT THERAPY FOR VASOMOTOR SYMPTOMS IN MENOPAUSE

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ABSTRACT

Background: Vasomotor symptoms are common in menopause. This study was conducted to observe the clinical presentations of menopause and to evaluate the effectiveness of hormone replacement therapy in the management of vasomotor symptoms.

Material & Methods: This was a prospective study conducted at Gynae B unit, Ayub Teaching Hospital, Abbottabad, Pakistan, from January 2002 to December 2003. Six thousand patients attended Gynaecology out patient clinic. Symptomatic post-menopausal patients were included in the study.

Results: There were 120 symptomatic post-menopausal patients. Their age range was 50-60 year. Among them, 60 (50%) patients presented with vasomotor symptoms, 12 (10%) psychological disturbance, 24 (20%) urogenital prolapse, 6 (5%) urinary symptoms, 12 (10%) gynaecological malignancies, 2 (1%) backache and 4 (3.5%) post-menopausal bleeding. Out of 60 patients complaining of vasomotor symptoms 50 opted to take hormone replacement therapy. Forty (80%) patients got complete relief of vasomotor symptoms within two weeks, 5 (10%) got moderate relief of hot flushes but were satisfied with treatment, while 5 (10%) got minimal relief of their symptoms.

Conclusion: Vasomotor symptoms are the commonest presentation of menopause. Majority of these patients get relief of these symptoms with hormone replacement therapy.

Key words: Menopause, Vasomotor symptoms, Hormone Replacement Therapy.

INTRODUCTION

The word menopause is derived from a Greek word *meno* or month and *pause* or to end and this term is used for permanent cessation of menstruation as a result of loss of cyclical ovarian follicular activity.[1] The period during which ovarian activity is gradually declining over several years is called climacteric. Climacteric involves a few years before menopause when endocrine changes begin and a few years after menopause when clinical manifestations are most acute.[2] Menopause is set to have accord when menstruation has ceased for 12 months.

Cyclical ovarian activities is normal characteristic of women's life and ovarian hormones are responsible for their health and vigor. With increase in life expectancy majority of the women will now spend one third of their lives in a stat of ovarian failure.[3] Proper assessment and management of menopause is the responsibility of health care providers.

Our hospitals provide medical care for a wide area of Hazara division including far-flung northern areas. It was decided to perform a prospective study to assess the magnitude of post-menopausal problems in the patients presenting in gynaecology out patient clinic, to study its different modes of presentation and to study the effect of hormone replacement therapy on the relief of vasomotor symptoms. The immediate symptoms of menopause are of the debilitating and long term sequelae such as osteoporoses significantly affect the quality of life and these problems take an ever increasing importance because of over aging society.

Hormone replacement therapy (HRT) is still the best option available for the management of acute postmenopausal problem especially vasomotor symptoms, which effect 50-70% of postmenopausal ladies. In 50% of patient this lasts for approximately 5 years or so.[4]

This study was conducted to observe the common clinical presentations of menopause and to evaluate the effectiveness of hormone replacement therapy in the management of vasomotor symptoms.

PATIENTS AND METHODS

This study was conducted in Gynae B unit, Ayub Hospital Complex, Abbottabad, from January 2002 to December 2003. Inclusion criteria were all symptomatic post-menopausal patients attending Gynecology out patient clinic. The age range of the patient was 50-60 years. Patients from all socio-economic groups were included in this study.

A proforma was designed which included detailed history, clinical examination and relevant investigations. History included details of chief complaints, past medical and surgical history, family history, personal history, drug history and detailed gynecological and obstetrical history.

General physical examination included assessment of height, weight and blood pressure. Blood pressure was checked at the start and then annually if normal.

Detailed breast examination was done. Abdominal and pelvic examinations were reserved for symptomatic patients but pap smear was taken in all the patients.

In all those patients for whom it was decided to start HRT some additional investigations were performed to find out any risk factor and to select the type of HRT suitable for the patient. These included checking for plasma lipid profile and if abnormal medical specialist was involved in its management.

Pelvic and abdominal ultrasound was performed if history and examination suggested some pathology. Endometrial biopsy was taken in the patient with post-menopausal bleeding. Liver function tests were done routinely in all the patients about to take HRT and repeated six monthly.

We used three types of HRT in this study:

1. Estrogen alone, estradiol valerate (Progynova). This preparation was used in 2 mg for those patients in whom hysterectomy had been done and it was used continuously.
2. A combination of estrogen and cyproterone acetate (Climen). This contains 11 tablets of 2 mg estradiol valerate and 10 tablets of 2 mg estradiol valerate and 1 mg cyproterone acetate. This preparation was used in early post-menopausal patients. It was used cyclically with regular withdrawal bleeding.
3. A combination of 2 mg 17-β estradiol and 10 mg dydrogesterane (Femoston). It was used as continuous combined therapy in post-menopausal patients distressed with vasomotor symptoms who did not want withdrawal bleeding.

Patients receiving HRT were properly counseled regarding the preparation given, the cost, significance of compliance, its common side effects and follow up schedule. First follow up visit was scheduled 1 month after the start of HTR to inquire any improvement in symptoms and to check for any side effects. Other visits were arranged at 3 months, 6 months and then annually. HRT was given for two years.

RESULTS

During the study period 120 symptomatic post-menopausal patients attended Gynae out patient clinic. The common clinical presentations are given in Table-1.

Table-1: Clinical presentation of menopause.

Presentation	No. of patients	Percentage
Vasomotor symptoms	60	50%
Psychological disturbance	12	10%
Genital prolapse	24	20%
Gynaecological malignancy	12	10%
Post-menopausal bleeding	4	3.3%
Backache	2	1%

Out of 120 patients, 60 (50%) presented with vasomotor symptoms. Ten patients refused to take HRT, due to their worries about its cost, safety and side effects. The remaining 50 patients received HRT. They were properly counseled and followed up for two years.

Age distribution of the patients presenting with vasomotor disturbance is given in Table-2.

Table-2: Age distribution of patients with vasomotor disturbance.

Age	No. of Patients
50-55 years	30
56-60 years	30

Table-3: Type of menopause.

Type of Menopause	No. of Patients & Percentage
Natural Menopause	36
Surgical Menopause	24
Premature Menopause	0
Total	60

Majority of the patients included in our study belonged to middle socio-economic class. (Table-4)

Effectiveness of HRT is given in Table-5.

Table-4: Socio-economic status of patients with vasomotor symptoms.

Poor	Middle Class	Upper Class
10	40	10

Table-5: Effectiveness of HRT.

Relief of symptoms	No. of patients	Percentage
Complete	40	80%
Moderate	5	10%
Mild	5	10%

DISCUSSION

For centuries people have recognized the problems associated with failing fertility but it is in this century that this aspect of woman's life has been recognized, thoroughly investigated and different management options evolved. Medical science has recognized the women's desire for high quality of life in post-menopausal status. It is our duty to provide the best possible therapy to achieve this goal.[5]

In our study, out of 120 patients 60 (50%) presented with vasomotor symptoms mainly hot flushes with mean frequency of 3-5 times/day for which they were seeking medical help. Apart from vasomotor symptoms, psychological disturbances mainly insomnia, anxiety, depression, irritability, loss of memory, lack of concentration and mood changes also affect a significant proportion of patients.[6]

The commonest peri and post-menopausal symptoms are vasomotor disturbances affecting 50-70% of population.[7] Our study results coincides with these findings. On the other hand its incidence is much less 10-20% in Chinese and Japanese races due to the difference in cultural, racial and dietary factors.[8]

In our study vasomotor symptoms were least bothered in patients belonging to poor socio-economic status that welcomed menopause because they felt relaxed after getting freedom from stress of repeated child bearing. Majority of patients in our study belonged to the middle class. They experienced vasomotor symptoms more significantly as they were taking loss of fertility as loss of status and self esteem especially those who have deferred their child bearing to the later age. Their main worries were loss of youth, changes in skin and hair and changes in figure and psychology due to menopause. This was the group willing to take HRT and in whom it was found to be most effective. They needed counseling, social support and adequate follow up apart from hormone replacement therapy to improve their quality of life.[9]

In the past few years health care professionals and patients have become confused regarding the use of HRT, still the most effective option available for the treatment of vasomotor symptoms. There are doubts regarding the safety of HRT especially after the publication of women health initiative study and million women study. These studies have highlighted that HRT may be responsible for carcinoma breast and increase the incidence of cardiovascular disease and deep vein thrombosis. This resulted in dramatic reduction in the use of HRT.[10,11]

There are different schools of thought. On one side there are views that menopause is completely a natural and physiological phenomenon and does not need any intervention. On the other hand some believe that it is a true hormone deficiency state, a state of organ failure and should be treated with hormone replacement for life. A more compromised status has evolved suggesting that each patient should be individually assessed and counseled depending upon the nature of her problem. HRT should be offered to those in whom estrogen deficiency is adversely interfering with personal, social or occupational life. It is the patient herself to decide whether she should start and continue to take HRT after all benefits and risks have been explained to her.[12]

In our study out of 60 patients with vasomotor symptoms 50 received HRT and were benefited. Ten patients belonging to the poor-socioeconomic status were reluctant to take HRT, firstly because their symptoms were less significant and secondly

they were worried about the cost of therapy and were also doubtful regarding its safety and side effects. They were given palliative treatment and haematinics to improve their general health and were counseled regarding healthy life style measures. All the patients included in our study were counseled regarding healthy life style measures including participation in regular exercise, avoidance of excessive intake of caffeine, taking balanced diet and avoidance of smoking. Help from medical specialist was sought if patients needed it like in care of hypertension, diabetes, cardiac problem or asthma. It has been observed in various studies that women who are more active suffer less from vasomotor symptoms. Regular aerobic exercises, adoption of healthy life style and balanced diet significantly reduces frequency and severity of vasomotor symptoms.[13]

Research is still going on in the use of complimentary medicines. In patients in whom HRT is contra-indicated like those with carcinoma breast, previous history of deep vein thrombosis or personal or family history of hormone dependent tumors, complimentary therapy can be used for relief of distressing vasomotor symptoms. These include deferent herbal products especially chinese herbs, soy, clover, evening primrose oil, ginkgo bilobo, different vitamins especially vitamin E and C and minerals like selenium. Homeopathy, acupuncture, reflexology are also included in complimentary therapy and do offer some relief in vasomotor symptoms but are not as effective as HRT. Moreover complementary therapy is also not completely safe as active ingredients of many herbal products are still not clear. Phyto-estrogens are plant substances that have effects similar to those of estrogens. Their prescription should be careful in the patients in whom HRT is contraindicated especially those having hormone dependent tumors like carcinoma breast, ovary and endometrium.[14,15,16,17,18]

Menopause is a distressing part of the woman's life. With every new study there appears to be a change in the advice given by regulatory agencies as to how we should advise our patients. The main indication for the use of HRT should be for symptomatic relief rather than prevention of long term problems. Minimal effective dose of HRT should be recommended which can be increased later for effective symptomatic relief. Patients should be managed by multidisciplinary approach with close liaison with different specialists and experts if needed.[19,20,21]

CONCLUSION

Vasomotor symptoms are the commonest presentation of menopause. Majority of these patients get relief of these symptoms with hormone replacement therapy.

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