
A LOOK TO MENOPAUSE FROM THE THIRD MILLENNIUM

An Essay

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SUMMARY

Menopause is the permanent cessation of menses that occurs after the cessation of ovarian function, the climacteric is a phase in the aging process of women that marks the transition from the reproductive stage of life to the non reproductive stage, and during which the ovarian function ceases.

Although menopause is a natural event, the years immediately before and the decades afterward are of much greater clinical significance, it can be uneventful or a time of significant symptoms.

Menopause occurs at a median age of 51 years, the age of menopause appears to be determined genetically and does not seem to be related to race, nutritional status, age of menarche however it may occur earlier in cigarette smokers, in some women who have had hysterectomies and in nulliparous women.

The main mechanism underlying the menopause is the depletion of the store of primordial follicle, another mechanism, however could be involved, namely loss of follicular responsiveness to the pituitary gonadotropins, this is supported by the presence of residual, dormant primordial follicles in post-menopausal ovaries and a significant increase in serum follicular stimulating hormone (FSH) concentration with distinct concomitant decrease in estradiol E₂ level. In some women however, ovarian function is lost earlier and more suddenly than expected as a result of natural causes, chemotherapy & radiotherapy, and surgery resulting in premature menopause.

The key endocrinologic event of the menopause is the decrease in ovarian production of estrogen followed by secondary increase in gonadotropin secretion and some relative alternation in androgen activity.

Menopause may be viewed as transition from middle age to old age by many women. Although some may look up on this with pleasant anticipation as a time of relative freedom from such worries as undesired pregnancies and stress of child bearing, many women fear this period because it indicates the loss of femininity or the loss of reproductive potential, which may be especially painful to infertile women. For others, the menopause may represent the beginning of aging, with its diminishing abilities and competence. Although the majority of symptoms associated with climacteric are due to primarily to the hypo-estrogenemia that result from ovarian failure, the degree and quality by which the symptoms affect the patient are also dependent on socio-cultural and psychologic factors that in turn determined by the woman's environment and the structure of her character.

The interaction between these three components (hypoestrogenemia, social/environmental, and psychologic make-up) explains the variable nature, severity and incidence of menopausal symptoms among different cultural, educational and racial population groups.

Anatomic and physiologic changes associated with peri-menopause include hot flushes, genitourinary atrophy manifested by incontinence and sexual dysfunction, bone loss and increased incidence of fracture, and unfavorable alteration in lipoproteins with increased risk of cardiovascular disease and dysphoric mood. There is no doubt that menopause could be associated with distressing symptoms and long-term life threatening diseases as osteoporosis and cardiovascular disease. It is no longer to dismiss these problems as inevitable consequences of aging or that the only management required is sympathy and emotional support. The benefits of hormone replacement therapy have been shown clearly to outweigh the risk. The treatment must be specific. Pure hormone-dependent symptoms such as hot flushes, dyspareunia and menopausal osteoporosis are best treated with appropriate hormone replacement.

One problem in achieving consensus on appropriate replacement therapy is the fragmentation of interests of various investigators. "Bone people" appear to think estrogen replacement is not necessary if there is no osteoporosis or that whatever dose is recommended for bone protection is sufficient in general. "Heart people" look at the problem from their limited perspective. Practitioners who seek to relieve symptoms of estrogen deficiency, such as hot flushes, think the job is done when relief is gained. It is necessary to state that we treat people, not symptoms or organs.

It is important to identify the minority of women in whom estrogen therapy may not be of benefit or may actually be harmful. These include patients with history of previously treated estrogen-dependent cancer (breast and endometrial) and who may not be at increased risk of osteoporosis and cardiovascular disease. For these patients, the potential benefit is minimal, and the potential risks become more important.

Although recent studies suggested no increase risk of recurrent breast or endometrial cancer among post-menopausal users, estrogen should be used with caution in these patients and the patient should be informed of the unknown risk of recurrence with hormonal therapy.

The risk factors for coronary heart disease may be assessed through family history and social history, physical examination to rule out hypertensive disease, and a blood screen for lipid and lipoprotein profile. If these risk factors are minimal, the protective effect of estrogen would be less important. The risk of osteoporosis may be quantitatively assessed by baseline bone density measurement and repeated at 1 to 2 years. Normal density that do not decrease on follow-up evaluation suggest a low risk for osteoporosis, associated bone fracture, which may be further minimized by proper diet, calcium, vitamin D, fluoride supplementation and weight-bearing exercise programs, if other menopausal symptoms as hot flushes and urogenital atrophy are not present or are minimal. These patients have little to gain from estrogen replacement and may best avoid the potential risk.

Perhaps the only absolute contraindication for hormone replacement therapy is active liver disease, because the liver is mostly responsible for steroid metabolism. However, once the active disease is resolved, the patient may resume hormone treatment, probably at lower dose if hepatic function is compromised.

It is important to take thorough medical and social history and to develop an accurate conception of the patient needs, expectations, and concern in the process of clinician needs to dispel myths and miss information and educate the patients, regarding physiologic changes associated with menopause and consequences of hypo-estrogenemia. Appropriately indicated laboratory tests to get the base line values and to assess the relative need for hormone therapy.

Finally, a therapeutic regimen is prescribed, with the permits that the dosage or preparation of each hormone prescribed may be changed according to the therapeutic efficacy, side effects and patient response.

The efficacy of estrogen replacement therapy in mitigating the menopausal symptoms and in preventing urogenital atrophy, osteoporosis-related bone fractures and the decreased risk of mortality and morbidity from cardiovascular disease and stroke, has been well documented. For this reason menopause clinic was established and it provides ideal opportunities for screening and health education and it is recommended that:

- 1) Balanced information about the menopause should be provided to women and their families.
- 2) Discussion of attitudes towards the menopause, with reassurance of overly pessimistic beliefs.
- 3) Health promotion sessions focusing upon diet, exercise and smoking (factors which are associated with general health and the development of osteoporosis).
- 4) Stress management sessions.

- 5) Group discussion of personal, health and social issues met by women during mid life.
- 6) Patients and physicians need to learn about the important contribution to preventive health care that occurs with estrogen. It is time to emphasize the positive aspects, the prospect for long life made healthy by a good preventive care program.