MENOPAUSE AND HORMONE THERAPY

Nahid Yasmin¹, Sayeeda Sultana,² Shahin Akhter Jahan Habib³

Background: Menopause is a natural biological process, not a medical illness. Although it is associated with hormonal, physical and psychosocial changes in life, it is not the end of youth or of sexuality. Several generations ago, few women lived beyond menopause, Today, women may spend as much as half of their life after menopause.

Hormone therapy (HT) has been widely used in recent decades to relieve the signs and symptoms of menopause and – doctors thought- to prevent disease associated with aging. However, new long term evidence has demonstrated that hormone therapy may actually increase risk of serious health conditions, such as heart disease, breast cancer and stroke.

Oestrogen therapy is still a safe, short –term option for some women, but numerous other therapies also are available to help women manage menopausal symptoms and stay healthy during this important phase of life.

Signs and symptoms:

Many women wonder and worry about what will happen when they reach menopause, but in fact it can be a liberating experience! During and after menopause women suffer from a wide range of symptoms^{1,2}. Every women experiences menopause differently^{3,4}. Menopause most often occurs between the ages of 45 and 55. Sign and symptoms also are likely to be vary from individual to individual^{5,6,7,8}. Some may breeze through menopause with few signs and symptoms. Some may experience a number of physical and emotional changes, including:

Irregular periods:

Menstrual periods may stop suddenly, or gradually get lighter or heavier and then stop. The unpredictability of periods may be first clue that menopause is approaching.

Vaginal and urinary changes:

As oestrogen level declines, the tissues lining vaginal and urethra become drier, thinner and less elastic. With decreased lubrication one may experience burning or itching, along with increased risk of infections of urinary tract or vagina. These changes may make sexual intercourse uncomfortable or even painful. Women may feel the need to urinate more frequently or more urgently and some may experience urinary incontinence ^{9,10,11,12}

Hot flushes:

As oestrogen level drops, blood vessels may expand rapidly causing skin temperature to rise. This can lead to a feeling of warmth that moves upward from chest to shoulders, neck and head, one may sweat and as the sweat and slightly faint. Face might look flushed and red blotches may appear on chest, neck and arms. Most hot flushes last from 30 seconds to several minutes, although they can last much longer. The frequency, as well as the duration of hot flushes varies from person to person. ^{13,14} Some may have them once every hour or only occasionally. They can occur any time during the day or night.

Sleep disturbances and night sweats:

Night sweats are often a consequence of hot flushes. Women may awaken from a sound sleep with soaking night sweats followed by chill. Some may have difficulty falling back to sleep or achieving a deep, restful sleep or achieving a deep, restful sleep. Lack of sleep may affect mood and overall health. Decreased production of female hormones might explain the increased prevalence of sleep disordered breathing in post menopausal women. ^{15,16,17}

Changes in appearance:

Many women gain a modest amount of weight about 5 pounds on average – during the menopausal transition. 18,19,20 The fat that once was concentrated in hips and thigh , may settle above waist and in abdomen. It may be noticed that a loss of fullness in breasts, thinning hair and wrinkles in skin has occurred. If previously one experienced adult acne, it may become worse. Although oestrogen level drops, body continues to produce small amounts of the male hormone testosterone. As a result, some may develop coarse hair on chin, upper lip, chest and abdomen.

Emotional and cognitive changes:

Some may experience irritability, fatigue, decreased memory and diminished concentration as they approach menopause. ¹⁸

Causes:

With age, ovarian follicles decrease in number become less responsive to stimulation by gonadotropic hormones and consequently produce progressively less oestrogen. Typically, ovarian function waxes and wanes over several years. This transitional phase is termed perimenopause or the climacteric. Eventually, no oestrogen is produced, resulting in menopause. Symptoms and signs of menopause may occur. 15,16,17

Menopause begins naturally when ovaries start making less oestrogen and progesterone. During reproductive years, these

^{1.} Assistant Professor, Obst. & Gynae, Dhaka Medical College, Dhaka

^{2.} Assistant Professor, Obst. & Gynae, BSMMU, Dhaka

^{3.} Assistant Professor, Obst. & Gynae, Dhaka Medical College, Dhaka

hormones regulate monthly cycles of ovulation and menstruations. When these hormones begins to decline, menstrual periods stop. Because this proem taken place over years, menopause is commonly divided into the following two stages.

Perimenopause:

This is the time one begin experiencing menopausal signs and symptoms even though she is still ovulating^{15,17}. Hormone levels rise and fall unevenly and some may have hot flushes and variations in periods. For instance, flow may be irregular or heavier or lighter than usual. This is a normal process leading up to menopause and may last four to five years or longer.

Post menopause:

Once 12 months have passed since last period, menopause has started ovaries produce much less oestrogen and progesterone and they do not release eggs. The years that follow are called post menopause. Certain surgical or medical treatments can bring on menopause earlier than expected. These include:

- Hysterectomy.
- Chemotherapy and radiation therapy.
- Premature ovarian failure.

Screening and diagnosis:

The signs and symptoms of menopause are enough to tell most women they have begun going through the transition.

Complications:

Several chronic medical conditions tend to appear after menopause. By becoming aware of the following conditions, one can take steps to help reduce risk.

Cardiovascular disease:

At the same time estrogen levels decline, risk of cardiovascular disease increases ^{16,17}. Heart disease is the leading cause of death in women as well as in men. These risk reduction steps include stopping smoking, reducing high blood pressure, getting regular aerobic exercise and eating a diet low in saturated fats and plentiful in whole grains, fruits and vegetables.

Osteoporosis:

During the first few years after menopause, women may lose bone density at a rapid rate, increasing risk of osteoporosis. Osteoporosis causes bones to become brittle and weak, leading to an increased risk of fractures. Post menopausal women are especially susceptible to fractures of the hip, wrist and spine. That's why it's especially important during this time to get adequate calcium- 1500 mg daily —and vitamin D — 400 to 800 international units daily. Its also important to exercise regularly. Strength training and weight bearing activities such as walking and jogging are especially beneficial in keeping bones strong.

Urinary incontinence:

As the tissues of vagina and urethra lose their elasticity, one may experience a frequent, sudden, strong urge to urinate (urge incontinence) or incontinence with coughing, laughing or lifting (Stress incontinence).

Weight gain:

Many women gain weight during the menopausal transition. Some may need to eat less- perhaps as many as 200 to 400 fewer calories a day and exercise more, just to maintain current weight.

Treatment:

Menopause itself require no medical treatment. Instead, treatments focus on relieving signs and symptoms and on preventing or lessening chronic conditions that may occur with aging. Treatment include.

Hormone Therapy:

Hormone replacement therapy benefits some menopausal women but there are health risks. Understanding the risks associated with hormone replacement therapy, when one should or should not take it and what other treatments are available.

Who can benefit from hormone replacement therapy:

Despite the inherent health risks, hormone replacement therapy still has a role in treating menopausal symptoms. For some women such as those who experience moderate to severe hot flashes or other menopausal symptoms – the benefits of short term therapy out weigh the potential risks. Hormone replacement therapy might still be treatment of choice if one has:

Hot flashes:

Hormone replacement therapy is still the most effective treatment for trouble some menopausal hot flashes and night sweats.

Vaginal discomfort:

Hormone replacement therapy can ease vaginal symptoms of menopause, such as dryness, itching, burning and discomfort with intercourse.

Osteoporosis:

Hormone replacement therapy continues to be an option for osteoporosis prevention, but it is recommended only when other medications for osteoporosis prevention have been considered and determined not to be best for you.

Who should avoid hormone replacement therapy?

Women with breast cancer or a history of blood coagulation disorder should not take hormone replacement therapy. Also it should be avoided for preventing memory loss, heart disease, heart attacks or strokes. Instead, other medication or life style changes can make for long term protection from these conditions.

Protecting long term health:

One of the previously believed benefits of hormone replacement therapy was that it promoted long term health of postmenopausal women, from reducing risk of heart disease to making bones stronger. But since that is no longer the case, here are some alternatives ^{18,19,20}.

A healthy heart:

Good for – heart health tips include:

- No smoking.
- Becoming physically active.
- Eating a low-fat, high fibre diet, with a variety of fruits and vegetables.
- Maintaining a healthy weight.
- Managing high blood pressure.
- Keeping cholesterol and triglyceride levels in check.
- Controlling diabetes.

Healthy Bones:

Keeping bones healthy and strong with.

- Calcium and vitamin D.
- Exercise Regular physical activity.
- Medication:
- Bisphosphonates.
- Raloxifene.
- Teriparatide.
- Calcitonin

Self -care:

Fortunately many of the signs and symptoms associated with menopause are temporary. Taking these steps to help reduce or prevent their effects^{18,19,20}.

- Cool hot flashes:

If one is experiencing hot flashes, taking regular exercise, dressing is loose, comfortable cotton cloth and trying to pinpoint what triggers hot flashes. For many women, triggers may include hot beverages, spicy foods, alcohol, hot weather and even a warm room.

- Optimizing sleep:

If patient have trouble slipping, avoiding caffeinated beverages and exercise right before bedtime is helpful practicing relaxation techniques, such as deep breathing, guided imagery and progressive muscle relaxation, can be very helpful.

- Strengthening pelvic floor:

Pelvic floor muscle exercises can improve some forms of urinary incontinence.

- Eating well:

Eating a balanced diet that includes a variety of fruits, vegetables and whole grains and that limits saturated fats, oils and sugars and aiming for 1500 milligrams of calcium and 400 to 800 international units of vitamin D a day can help a lot.

- Refraining from smoking:

- Smoking increases risk of heart disease, stroke, cancer and a range of other health problems. It may also increase hot flashes and bring on earlier menopause. It is never too late to benefit from stopping smoking.

- Exercising regularly:

Getting at least 30 minutes of moderate, intensity physical activity on most days to protect against cardio vascular disease, dilutes osteoporosis and other conditions associated with aging. Exercise can also help to reduce stress. Trying a combination of weight bearing aerobic exercises.

- Scheduling regular checkups:

Talking with doctor or health worker and taking advice about how often one should have mammograms, pap tests, VIA test, lipid level and other screening tests may help to stop healthy. However, in our perspective, it is not always possible for our rural women to reach for proper and effective medical care.

Conclusion:

Menopause is an important time in a woman's life. Her body is going through changes that can affect her social life, her feelings about herself, and her functioning at work. In the past, menopause was often surrounded by misconceptions and myths. Now it is recognized that menopause is a natural step in the process of aging. Contrary to the old fashioned view that life is downhill after menopause, many women today find that the years after menopause offer new discoveries and fresh challenges.

References:

- 1. Sallam H, Galal Af, Rashed A. Menopause in Egypt:past and present perspectives. Climacteric. 2006 Dec;9(6):421-9[[
- Amore M, Di Donato P,Berti A, Palareti A, Chirico C, Papalini A, Zucchini S.Sexual and psychological symptoms in the climacteric years. Acta Obstet Gynecol Scand. 2005;80(11):1071-7.
- 3. Anttalainen U, Saaresrsnta T, Aittokallio J, Kalleinen N, Vahlberg T, Virtanen I, Polo O. Impact of menopause on

- the manifestation and severity of sleep- disordered breathing. Acta Obstet Gynecol cand. 2006;85(11):1381-8
- Hunter M, Battersby R, whitehead M. Relationships between psychological symptoms, somatic complaints and menopausal status. Climacteric. 1986 Oct:8(3):217-28.
- 5. Melby MK. Factor analysis of climacteric symptoms in Japan. Maturitas. 2005 Nov-Dec;52(3-4):205-22.
- Vanwesenbeeck 1, Vennix P, Van de Wiel H: 'Menopaisal symptoms': associations with menopausal ststus and psychosocial factors. J Psychosom Obstet Gynaecol. 2001 Sep;22(3):149-58.
- Melby MK.Climacteric symptoms among Japanese women and men: comparison of four symptom checklists. Climacteric. 2006 Aug;9 (4):298-304.
- 8. Anderson D, Yoshizawa T, Gollschewski S, Atogami F, Courtney M. Relationship between menopausal symptoms and menopausal status in Australian and Japanese women:preliminary analysis. Nurs Health Sci. 2004 Sep;6(3):173-80.
- Sierra B, Hidalgo LA, Chedraui PA. Measuring climacteric symptoms in an Ecuadorian population with the Greene climacteric Scale. Maturitas. 2005 Jul 16;51(3):236-45.
- 10. http://www.hormone.org/public/menopause.cfm
- 11. http://www.menopause.org/default.htm

- 12. http://www.mayoclinic.com/health/menopause/DS00119
- http://www.niapublications.org/agepages/ menopause.asp
- 14. http://womenshealth.gov/faq/menopaus.htm
- 15. en.wikipedia.org/wiki/Menopause
- Pavon de Pazl, Alameda Hernando C, Olivar Roldan J. Obesity and menopause. Nutr Hosp. 2006 Nov0Dec; 21(6):633-7.
- 17. Colombel A, Charbonnel B. Weight gain and cardiovascular risk factors and the post-menopausal women. HumReprod.1997 Oct;12 Suppl 1:134-45.
- Blumel JE, Castelo- Branco C, Rocongliolo ME, Bifa L, Tacla X, Mamani L. Changes in body mass index around menopause: a population study of Chilean women. Menopause.2001 Jul-Aug;8(4):239-44.
- 19. Castelo-Branco C,Blumel JE,Roncagliolo ME, Heya J, Bolf D, Binfa L, Tacla X, Colodron M. Age, menopause and hormone replacement therapy influences on cardiovascular risk factors in a cohort of middle- aged Chilean women. Maturitas. 2003 Jul 25;45 (3):205-12.
- Bosworth HB, Bastain LA, Kuchibhatla MN, Steffens DC, McBride CM, Skinner Cs, Rimer BK, Siegler LC. Depressive symptoms, menopausal status, and climacteric symptoms in women at midlife. Psychosom Med. 2001 Jul-Aug; 63(4):603-8.