### Menopause

### **Abstract**

Menopause is defined as the permanent cessation of menses resulting from reduced ovarian hormone secretion that occurs naturally or is induced by surgery. Natural menopause is recognized after 12 months of amenorrhea that is not associated with a pathologic cause. The average age of menopause worldwide is 51 years. The typical age range for the occurring is between the ages of 45 to 55. The average age of menopause varies according to geographic location is different in different countries and societies. In developing countries, it is about 1 to 2 years lower than the developed countries. In Nepal, the average age for menopause is 49 to 50 in Kathmandu valley and 47 in other rural areas. In the western world, last period ever occurring between the ages of 55 to 60 is known late menopause and an early menopause is defined as having one's final period, somewhere between the ages of 45 to 50.

A hot flush, perspiration, night sweats, vaginal dryness, sleep disturbance, mood symptoms, somatic complaints, uterine bleeding, sexual dysfunction are common. Specific treatment for menopausal symptoms determined by physician based on age, overall health and medical history, and current symptoms. Several therapies that help to manage the symptoms often associated menopause including hormone replacement therapy involves administration of a combination of the hormones estrogen and progesterone or administration of estrogen alone.



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### Introduction

Menopause is a natural stage in a woman's life and part of aging process, when the menstrual periods tend to end permanently. This happens because of women's age, her ovaries make less of the female hormones estrogen and progesterone. These hormones regulate the menstrual cycle in a woman's body. Declining of ovarian estrogen starts around the age of 40, however, the average age of menopause worldwide is 51 year. The typical age-range for the occurring is between the ages of 45 to 55. The average age of menopause varies according to geographic location is different in different countries and societies. In developing countries, it is about 1 to 2 years lower than the developed countries. In Nepal, the average age for menopause is 49 to 50 in Kathmandu valley and 47 in other rural areas. According to Dr Swaraj Rajbhandari consultant (OB/GYN) Kathmandu Modal Hospital, age of menopause in Nepal is 47-48 years, and like in many developing countries. The proportion of women who are menopausal increases with age, from 5% among women age 30-34 to 64% among women of age 48-49. Overall 16% of

women age 30- 49 are menopausal. The proportional of currently married women age 48-49 who are menopausal declines between 1996 and 2001 (61% and 56%, respectively) but increased to 63% in 2006 (Nepal demography and health survey 2006).

In a study carried out in 3000 women within the age-group of 40 to 60, in seven South Asian countries, complaints of vasomotor symptoms and urinary incontinence were largely associated with the menopausal transition through the first year of menopause, while psychological symptoms largely occurred after menopause. In some developing countries, such as India and Philippines, the mediam age of natural menopause is considerably earlier, at 44 years. In the Western world, last period ever occurring between the ages of 55 to 60 is known as late menopause and an early menopause is defined as having one's final period, somewhere between the age of 45 to 50 (menopause from Wikipedia, the free encyclopedia).

The medical news, Salzburg, Austria, march 24-26,2011 fond that the onset of menopause usually begins between the age 45 to 55. The study found that premature menopause was most common in rural areas, as well as among agricultural worker, women who were illiterate and women who had a low body mass index.

Rarely, the ovaries stop working at a very early age, anywhere from the age of puberty to age 20, this is known as Premature Ovarian Failure (POF). Just 1% of woman experience POF, and it is not considered to be due to the normal effects of aging. Some known causes of premature ovarian failure include autoimmune,

disorders, thyroid disease, diabetes mellitus, chemotherapy, radiotherapy, and spontaneous causes of premature ovarian failure, the cause is unknown. The menopausal process occurs in four stages:

- Pre-menopause
- Perimenopause
- Menopause
- Post menopause

**Pre-menopause** refers to a woman's fertile life, which range from her first menstrual period to her last menstrual period. However, the term is often misused to describe years immediately before menopause and also to describe premature menopause.

**Perimenopause:** This transition starts before your period stop, symptoms during this time including mood swings, hot flushes, and loss of sex drive. Perimenopause encompasses the years preceding menopause. It describes the length of time when periods are becoming lighter or heavier. When discussing menopause, most woman refer to perimenopause because it's during this stage that the hormone levels change. During perimenopause, the production of most of the reproductive hormone, including the estrogen, progesterone diminish and become more irregular, often with wide and unpredictable fluctuations in levels. In this stage ovarian production decrease, the follicle stimulating hormone increases, triggering symptoms like hot flashes, headaches, memory problems and mood swings etc.

**Menopause** is the permanent termination of menstruation and fertility. This

stage begins when a woman has her last period. Menopause can be defined by more than 6 consecutive period free months. At this stage, ovaries no longer produce egg as hormone production stops and common changes become noticeable including vaginal dryness and loss of sex drive.

Post menopause is the stage of life after menstrual periods have completely stopped for more than 12 months. At this point, a woman is considered infertile, and no longer in the possibility of becoming pregnant. The two primary hormones for a healthy woman are estrogen and progesterone. For a woman concerned about post-menopause and estrogen, her estrogen production drops to 40 to 60 percents of what it once was before menopause and progesterone production drops to almost zero. After the body's progesterone declines to this zero level, the postmenopausal woman is open to a number of unwanted and unhealthy symptoms such as hot flashes, night sweats, vaginal dryness, UTI and memory loss.

### **Causes of Menopause:**

### 1. Proximate perspective

A natural or physiological menopause is that which occurs as a part of a woman's normal aging process. It is the result of the eventual atresia of almost all occytes in the ovaries. This causes an increase in circulating Follicle-stimulating hormone (FSH) and Lutenizing hormone (LH) levels as there are a decreased number of occytes responding to these hormones and producing estrogen. This decrease in the

production of estrogen leads to the per menopause symptoms of hot flashes, insomnia and mood changes, as well as post menopausal osteoporosis and vaginal atrophy.

### 2. Surgical menopause:

The uterus sometimes can be surgically removed (hysterectomy) in a young woman, her periods will cease permanently, and the woman will technically be infertile. But as long as one of her ovaries is still functioning, the woman will not have reached menopause, even without the uterus, ovulation and release of the sequence of reproductive hormones will continue to cycle on until menopause is reached. But in circumstances when a woman's ovaries are removed even if the uterus were to be left intact, the woman will immediately be in surgical menopause.

Thus, menopause is based on the natural or surgical cessation of hormone production by the ovaries, which are a part of the body's endocrine system.

# Possible Effects of Perimenopause and Menopause:

1 Vascular instability: Hot flashes including nigh sweats and in a few people cold flashes is possible. But when it is continuous it increased the risk of atherosclerosis. There may also be the symptoms of palpitation, fatigue and weakness. The physiologic changes with hot flushes are perspiration cutaneous vasodilatation. Both these two

function are under central thermoregulatory control

- 2. Urogenital atrophy is also known as vaginal atrophy. Thinning of the membranes of the vulva, the vagina, the cervix and also the outer urinary tract, along with considerable shrinking and loss in elasticity of all the outer and inner genital areas. Minimal trauma may cause vaginal bleeding. Other urogenital effects are itching, dryness, watery discharge (leucorrhea), increased susceptibility to inflammation and infection, for example vaginal candidiasis and UTI.
- 3. Musculoskeletal: Risk of osteoporosis, gradually developing over time, joint pain, muscle pain, back pain, loss of muscle tone leads to pelvic relaxation, uterine descent and anatomic changes in the urethra and neck of the bladder. The pelvic cellular tissue becomes scanty and the ligaments supporting the uterus and vagina loss their tone.
- 4. Skin soft tissue: There is breast atrophy, skin thinning and becoming drier, Decreased elasticity of the skin. Formication, a sensation rather like pins and needles, more specifically like ants crawling on or under the skin.
- 5. Sexual dysfunction: Oestrogen deficiency is often associated with decreased sexual desire. There may also decreased libido, vaginal dryness and vaginal atrophy, problems reaching orgasm, dyspareunia or painful intercourse
- **6. Psychological changes:** Many women experience psychological change These

change may include depression, anxiety, sleep disturbances, poor quality sleep, light sleep, insomnia, irritability, fatigue, memory loss and problems with concentrat

## Advise to help reducing the menopausal effects:

- Use over the counter water based vaginal lubricants or moisturizers.
- Avoid caffeine and exercise not right before bedtime.
- Relaxation techniques such as deep breathing, progressive muscle relaxation can be very helpful.
- Pelvic floor muscle exercises, called kegel exercise can improve some forms of urinary incontinences.
- Eat a balance diet that includes a variety of fruits, vegetables and whole grains and that limited saturated fats, oils ad sugars, as well as all the important adequate calcium, vitamins and minerals, supplements.
- Do not smoke; smoking increase the risk of heart disease, stroke, osteoporosis, cancer and a range of other health problems.
- Exercise regularly. Get at least 30 minutes of moderate intensity physical activity such as walking, jogging or dancing, at least for 3 days in a week for healthy bone.
- Schedule regular check up for eg mammograms, pap tests, lipid level

- testing and other screening test. Get regular pelvic and breast exam.
- If night sweats, sleep in a cool room or with a fan on. Dress in layers that can be taken off if you get too warm. Have a cold drink when a flash is starting. When a hot flash starts, sty to go somewhere cool place.

### **Treatment of Natural Menopause:**

### 1 Hormone Replacement Therapy (HRT):

- Estrogen therapy remains by far, the most effective treatment option for relieving menopausal hot flashes, vaginal dryness and some urinary problem. Depending on personal and family medical history, Doctors may recommend estrogen in the lowest dose needed to provide symptoms relief. In hormone replacement therapy, estrogen can be taken alone or it can be combined with another hormone progesterone.
- Anti-depressant drugs: Selective serotonin reuptake, inhibitors can be helpful, including flouxetine, paroxetine and sertraline.
- Clonidine, a pill typically used to treat high BP, may significantly reduce the frequency of hot flashes, but unpleasant side effects are common.
- Take medicine, if it is for health problems for examples, high blood pressure, high cholesterol or osteoporosis.
- Use water based vaginal lubricant or vaginal estrogen cream or tablet to help with vaginal discomfort.

- 2. Surgical Menopause: Estrogen replacement is generally started immediately after surgery.
- 3. Vitamin D supplementation alone with calcium can reduce osteoporosis and fractures.
- 4. Supplementary calcium daily intake 1 to 1.5 gm can reduce osteoporosis and fracture.

#### Reference

Dutta, D.C.(2008) Test book of Gynecology including contraception (5<sup>th</sup> ed) Calcutta: New Central Book.

Howkins and Bourne Shaw (2004). *Text book of Gynecology* (13<sup>th</sup> ed). New Delhi Elsevier India Ltd.

Dawn, C.S. (2003) Text book of Gynecology. Colcatta: Dawn Books.

Arulkumaran, S. Sivanesaratnam V. Chatterjee (2005). *Essentials of Gynecology*. New Delhi: Jaya P Brothers,

Nepal Demographic and Health Survey 2006.

http. <u>www.health.am</u>. gynecology articles no 22 2005, Armenian Medical network.

http. www. Health Web site, Web MD, Women's Health News letter.

Medical News, Salzburg, Austria .March 24-26, 2011.

