MENOPAUSE & HRT

Patient Information Fact Sheet

What is menopause?

Menopause is defined as the time of a woman's last menstrual period. This is the time in a woman's life when fertility ends, although the loss of fertility is not a sudden event. Fertility begins to decline gradually as the number of eggs in the ovaries falls. This fall is associated with reduced levels of the reproductive hormones estrogen and progesterone.

Every woman is different but menopause usually occurs between the ages of 40 and 58. In some women it may occur as early as 40—this is often a hereditary trait passed from mother to daughter. There is some evidence to suggest that the earlier a woman starts her periods, the later her menopause will be. Menopause occurs naturally but may also be induced by surgery, such as the removal of the ovaries, or by damage to the ovaries caused by **chemotherapy** or radiation.

A woman is described as postmenopausal if it has been more than a year since her last menstrual period. A woman is described as perimenopausal from the time that symptoms of the approaching menopause begin until 12 months after her last period.

What causes menopause?

During a woman's reproductive life, the ovaries produce two hormones, estrogen and progesterone. These are both necessary for the normal reproductive cycle to happen. As the number of eggs in the ovaries diminishes, the level of hormones produced starts to decrease. It is the marked loss of estrogen at menopause that is responsible for most of the physical signs and symptoms.

What are the symptoms of menopause?

Menopause affects every woman differently—while some may suffer no symptoms at all others may suffer effects severe enough to cause them to seek medical advice. Some of the more common symptoms are listed below.

- Periods become irregular and eventually stop (changes may start as early as six years before the menopause). Sometimes the periods become heavier in the years before menopause—seek medical advice if this occurs because fibroids may also cause heavy periods. Heavy and prolonged periods may cause anemia.
- Hot flashes may occur before or during menopause, causing sweating, blushing and night sweats. These symptoms may last from a few months or up to five years.
- Vaginal dryness, caused by a decrease in secretions, may make sexual intercourse uncomfortable and also increases susceptibility to infections or cystitis.
- Mood changes are common and may be the result of menopause itself or the result of other life changes going on at the same time.
- Osteoporosis: after menopause bone mass begins to decrease making the bones thinner and more prone to fracture. Women who are small-boned, heavy drinkers, smokers or taking medicines such as **levothyroxine** or **corticosteroids** are at greater risk for osteoporosis.
- Postmenopausal women are at an increased risk for cardiovascular disease, including stroke.

How are the symptoms of menopause treated?

Hormone replacement therapy (HRT) aims to restore estrogen to premenopausal levels in order to reduce symptoms and also to protect against the long-term effects of reduced estrogen levels. Estrogen protects women against cardiovascular disease and osteoporosis while the risk of developing these diseases increases as levels of the hormone fall. Lack of estrogen is an additional risk factor for cardiovascular disease but not a sole cause. Other risk factors include smoking, high blood pressure, obesity and high cholesterol. Similarly, there are other factors besides menopause that affect a woman's likelihood of developing osteoporosis, such as being very underweight (particularly women who may have suffered from anorexia nervosa), lack of exercise in youth, and lack of calcium (particularly as a child).

The results of recent studies have shown that HRT does not have any beneficial effects on cardiovascular disease but that it does offer women protection against osteoporosis and fractures in the long term. However, after consideration of the risks and benefits, HRT is recommended for use in the prevention of osteoporosis only in postmenopausal women at high risk for future fractures who are intolerant of, or contraindicated for, other medicines approved for osteoporosis prevention. While studies have shown that women using HRT for longer than five years have a slightly increased risk for breast cancer compared with non-users, this risk must be weighed up against the consequences of not using HRT. Your doctor will explain the risks and benefits of HRT in more detail if you are concerned.

How is the treatment given?

HRT may be given in various forms and dosages. A combination of estrogen and progesterone is usually given, except in women who have had a hysterectomy who do not require the progesterone component. HRT preparations contain a similar combination of hormones to those in the contraceptive pill but in much lower dosages. HRT is available as tablets, skin patches, creams, gels, intravaginal rings, suppositories and implants. HRT should be used at the lowest effective dose for the shortest possible time. Some women may be unable to use HRT, for example, those with a history of blood clots or breast cancer.

Estrogen can be given in the form of a cream, gel, suppository or vaginal ring to women who are suffering from vaginal dryness and subsequent discomfort during intercourse. It may be useful if no other menopausal symptoms are present, or as an addition to HRT treatment. The hormone given is **estradiol** (Estrace, Climara), or **conjugated estrogens** (Premarin).

Tablets and patches usually contain a combination of estrogen and progesterone but may contain estrogen alone if the woman has had a hysterectomy. Sometimes the hormones are given on a cyclical basis, which can produce a monthly bleed similar to a period. While this is acceptable for premenopausal women with symptoms, it may not be the best method for women who have not had a period for some time. For postmenopausal women a continuous level of hormones is usually given which may produce some bleeding or spotting initially—this should stop completely after a few months. The hormones given may be estradiol combined with **levonorgestrel** (Seasonique,

Camrese), **norethindrone** (Junel 21 1/20, Loestrin 21 1/20) **norgestrel** (Cryselle, Ogestrel) or **medroxyprogesterone** (Prempro). The patches are usually replaced every three to four days and the tablets are taken once daily.

First-line treatments for the prevention of osteoporosis include a group of drugs known as **bisphosphonates**, for example, **alendronate** (Binosto, Fosamax), **etidronate**, **ibandronate** (Boniva), **risedronate** (Actonel), and **zoledronic acid** (Reclast). Certain bisphosphonates can also be used to treat established osteoporosis such as **risedronate** (Atelvia). A combination product containing **alendronate and vitamin D_3** (Fosamax Plus D) is also available. **Calcium supplements** to prevent bone loss may also be recommended if dietary intake of calcium is insufficient. A hormone called **calcitonin-salmon** (Miacalcin injection, Fortical nasal spray) may used in the short term to treat postmenopausal osteoporosis.

›Further information

American Menopause Society: www.menopause.org

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