UNIT NO. 1

MENOPAUSAL HEALTH IN WOMEN

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ABSTRACT

The Women's Health Initiative released results showed that women on combined HRT had an increased risk of breast cancer, risk of cardiovascular disease, venous thrombosis and embolism, strokes and dementia. Current practice is to treat women with estrogens if they present with intolerable climacteric symptoms. Treatment is for the shortest time possible and with the lowest dose required. On an average, a period of 2-5 years of treatment is a reasonable approach. HRT Treatment for the purpose of prevention of cardiovascular disease, dementia, colon cancer and osteoporosis is no longer initiated although it might be reasonable to give estrogens to women with distressing climacteric symptoms who are also at risk of osteoporosis. Risk of pregnancy still occurs when the ovaries are not totally functionless even though the periods are no longer regular. Hormonal contraception suitable for mature women in their perimenopausal years includes the combined oral contraceptive pills, the progesterone-only pill, and transdermal patches. Intra-uterine devices can be used. Male partners can use barrier methods. The importance of regular exercises is under-estimated. The bone-building component comes from resistance (weight bearing) exercises. This may involve weight lifting and body building in men to toning of muscle groups in women with repetitive lifting of lighter weights. Established osteopenia or osteoporosis can be treated with calcium, vitamin D, and exercise and, depending on the BMD, with addition of bisphosphonates or raloxifene. Treat for a minimum of 2 years and then repeat their BMD. Overweight and obesity is best prevented.

INTRODUCTION

The human race has an innate desire to look good, feel good and live longer. With an average life expectancy of 80 years and menopause taking place around 51 years, the average woman in Singapore can live up to a third of her life after her ovaries cease to function. Hence, medical practitioners will be challenged to manage the progression of women's changing health needs and anticipate their risks to health and well-being.

RISKS OF MENOPAUSAL HORMONE THERAPY: EVIDENCE FROM WHI STUDIES

For many years, doctors treated women with menopausal symptoms with estrogens. The success story of estrogen evolved into a multi-million dollar business with many companies making various forms of hormone replacement therapy (HRT). Studies, mainly observational, were conducted to show that HRT was also good for the heart, the brain, the gut, the bones and the skin. HRT became a buzzword for women not only for their climacteric symptoms but also for those keen to preserve their youth. These wonder drugs were prescribed to women for as long as they lived and had deep enough pockets to pay for them. For medical practitioners, income from repeat prescriptions seemed like an unending goldmine.

The "party" came to an abrupt end in July 2002[1] with the Women's Health Initiative released results showing that women on combined HRT (i.e. taking the tablets that have both estrogens and progestogens) had an increased risk of breast cancer. In the same study, it was found that the risk of cardiovascular disease, venous thrombosis and embolism, strokes and dementia also increased. Risks of colon cancer and osteoporosis were reduced. It was believed that the progestogen component of the tablet was responsible for the increased risk of breast cancer.

The use of HRT drastically fell worldwide. Many women either stopped the medication themselves or were advised to do so by their doctors. Those who continued to take them were advised of the risks. Some women sought alternative treatments like phyto-estrogens, herbal preparations and natural therapies to control their hot flushes.

In April 2004, the estrogen-alone arm of the WHI study[2] came to a halt when it was found that even taking estrogens without progestogens was associated with an unacceptably high risk of strokes. Interestingly, the risk to breast cancer and coronary heart disease was not significantly increased, thereby adding proof that the progestogen component was the culprit.

The current practice in KK Hospital is to treat women with estrogens if they present with intolerable climacteric symptoms. Treatment is for the shortest time possible and with the lowest dose required. On an average, a period of 2-5 years of treatment is a reasonable approach. We do not initiate treatment for the purpose of prevention of cardiovascular disease, dementia, colon cancer and osteoporosis although it might be reasonable to give estrogens to women with distressing climacteric symptoms who are also at risk of osteoporosis.

In women with an intact uterus, a drug containing both an estrogen and progestogen is used to protect the uterine endometrium from developing hyperplasia. In hysterectomised patients, estrogen only is used.

CONTRACEPTION IN THE PERIMENOPAUSAL YEARS

Menopause results from ovarian failure and pregnancy is no longer a risk. Risk of pregnancy still occurs when the ovaries are not totally functionless even though the periods are no longer regular.

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Pregnancy and delivery records at KK Hospital amongst older women more than 45 years of age in the past five years showed quite a number of pregnancies. The oldest woman delivering was 56 years of age! Contraceptive advice is a necessary responsibility of the healthcare provider who manages mature women patients. The contraceptive options available to mature women are similar to that used in the younger age group.

Hormonal contraception suitable for mature women in their perimenopausal years include the combined oral contraceptive pills (provided the patient does not smoke or have other medical contraindications), the progesterone-only pill ("Mini-Pill"), and transdermal patches (e.g. Evra) or implants (e.g. Implanon, Norplant). Intra-uterine devices can be used and the standard copper devices (e.g. Multiload) and levonorgestrel IUCD (e.g. Mirena) are suitable for older women. Male partners can use barrier methods.

For more permanent solutions, tubal occlusion techniques by laparoscopy (e.g. Filshie clipping) or through a hysteroscope (e.g. Essure) can be offered. The male partner can be offered a vasectomy.

OSTEOPOROSIS

Osteoporosis is a silent killer because it is insidious and most people do not have symptoms until fracture occurs. There is significant mortality and morbidity associated with hip fractures. Up to 20% of women will die from complications resulting from femoral neck fractures.

The early symptoms of menopause all too often overshadow the need to prevent onset and progression of osteoporosis. When hot flushes, psychological changes, and uro-genital atrophy gradually become less of concern, there seems to be a lull before the incidence of fractures increases a decade or two later.

Bone Mineral Densitometry (BMD) can measure bone density. There are some recent developments in ultrasonic means of assessment.

Clinically, it is also possible to estimate the risk of osteoporosis by the Osteoporosis Self-Test for Asians (OSTA) scoring system[3]. This is calculated by using the formula:

Age (in years) – Weight (in kg) = OSTA score

There are three possible scores:
1. Less than 1. Low risk for osteoporosis.
2. 1-20. Moderate risk for osteoporosis.
3. > 20. High risk for osteoporosis.

For example, a 60-year-old woman weighing 50 kg has a score of 10. This means that she has a moderate risk of osteoporosis.

The prevention of osteoporosis involves an adequate intake of calcium either in the form of carbonate, citrate or lactate. The latter is found in milk and is well absorbed. About a glass of milk will provide 400 mg of calcium. The carbonate variety is economical. The citrate variety is popular due to better gastric tolerability. Daily requirements should be as close to 1500 mg as possible.

In addition, Vitamin D (400 IU per day) helps in the absorption and utilization of calcium. It plays an important role in the prevention of osteoporosis.

The importance of regular exercises is under-estimated. While many people who are into an exercise program tend to concentrate on the aerobic or "cardio" component, the bone-building component comes from resistance (weight bearing) exercises. This may involve weight lifting and body building in men to toning of muscle groups in women with repetitive lifting of lighter weights.

Established osteopenia or osteoporosis can be treated with calcium, vitamin D, and exercise and, depending on the BMD, with addition of bisphosphonates or raloxifene. In KK Hospital, we treat women for a minimum of 2 years and then repeat their BMD.

OBESITY

Obesity is fast becoming a major health concern in the developed world. It is unhealthy to be overweight. Weight management is a challenging aspect of healthcare. Obesity refers to a Body Mass Index (BMI) in excess of 30 based on WHO definition. BMI is calculated by this formula:

Weight in kilograms ÷ (Height in meters × Height in meters)

In the 1998 National Health Survey[3], based on WHO criteria, in adults (18-69 years), it was found that 24.4% were overweight (BMI 25.0-29.9) and 6.0% were obese (BMI >30). This was most prevalent amongst the Malays, followed by Indians and Chinese. It was also more pronounced in females. The highest proportion of obesity was found in the 50-59 year old age group.

Some reports have suggested that it be lowered to 27 to suit our local population[4]. Based on the revised criteria, the increased prevalence would bring the figures closer to that reported in the United States of America.

Overweight and obesity is best prevented. This involves education of our population, and targeted at people from young to old to adopt a healthy lifestyle – a diet low in carbohydrates, oils and fats, and high in fiber, and regular exercises.

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LEARNING POINTS

- **The Women's Health Initiative released results showed that women on combined HRT (i.e. taking the tablets that have both estrogens and progestogens) had an increased risk of breast cancer, risk of cardiovascular disease, venous thrombosis and embolism, strokes and dementia.**
- **Current practice is to treat women with estrogens if they present with intolerable climacteric symptoms. Treatment is for the shortest time possible and with the lowest dose required. On an average, a period of 2-5 years of treatment is a reasonable approach. HRT Treatment for the purpose of prevention of cardiovascular disease, dementia, colon cancer and osteoporosis is no longer initiated although it might be reasonable to give estrogens to women with distressing climacteric symptoms who are also at risk of osteoporosis.**
- **Risk of pregnancy still occurs when the ovaries are not totally functionless even though the periods are no longer regular. Hormonal contraception suitable for mature women in their perimenopausal years include the combined oral contraceptive pills (provided the patient does not smoke or have other medical contraindications), the progesterone-only pill ("Mini-Pill"), and transdermal patches (e.g. Evra) or implants (e.g. Implanon, Norplant). Intra-uterine devices can be used and the standard copper devices (e.g. Multiload) and levonorgestrel IUCD (e.g. Mirena) are suitable for older women. Male partners can use barrier methods.**
- **The importance of regular exercises is under-estimated. The bone-building component comes from resistance (weight bearing) exercises. This may involve weight lifting and body building in men to toning of muscle groups in women with repetitive lifting of lighter weights.**
- **Established osteopenia or osteoporosis can be treated with calcium, vitamin D, and exercise and, depending on the BMD, with addition of bisphosphonates or raloxifene. Treat for a minimum of 2 years and then repeat their BMD.**
- **Overweight and obesity is best prevented. This involves education of our population, and targeted at people from young to old to adopt a healthy lifestyle – a diet low in carbohydrates, oils and fats, and high in fiber, and regular exercises.**