

MENOPAUSAL HEALTH IN WOMEN

Dr Ang Seng Bin, Dr Teoh Seng Hin, Dr Carol Tan-Goh

Menopause is not a disease but a natural stage of life that all women will experience in appropriate time. Like puberty, the timing of menopause can vary widely between different women. Some may breeze through it with no problems, whereas others may need help to cope with the distressing symptoms. Menopause is defined as the final menstrual period and usually confirmed in retrospect when a woman has missed her periods for 12 consecutive months (in the absence of other causes). There is no independent biological marker for menopause. Estradiol or follicle-stimulating hormone measurements are usually not necessary to confirm menopause.

SFP2007; 33(2): 56-59

STAGES OF REPRODUCTIVE AGEING

(see chart on page 57)

Age at menopause

The mean age for menopause for local women in 2 studies is 49 years old with a range between 40 and 58 years old^{1,2}.

Premature menopause

Menopause that occurs at age less than 40 years old

Early menopause

Menopause that occurs at age less than 45 years old.

Factors affecting age of menopause

While age of menopause is genetically determined, cigarette smoking has been shown to bring forward the age of menopause by about 2 years. Other factors that may result in earlier menopause include nulliparity, exposure to toxic chemicals, treatment of malignancy with chemotherapy or pelvic radiation, epilepsy, and treatment for depression. Oral contraceptives have no effect on the age of menopause.

MENOPAUSAL SYMPTOMS

Vasomotor symptoms and vaginal dryness are considered to be typical menopausal symptoms because of a large body of findings

that strongly link these symptoms to the menopausal transition and the post-menopause. Conditions that mimic menopausal symptoms are listed in Table A.

Table A

Conditions that can mimic menopausal symptoms

Pregnancy – to be excluded as women are still fertile during the perimenopausal period.

Psychosocial – panic attacks, anxiety, depression

Endocrine – thyrotoxicosis, diabetic insulin reaction, insulinoma, pheochromocytoma

Medications – nitroglycerin, niacin, nifedipine, calcitonin, clomiphene citrate

Vasomotor symptoms

A hot flush is a sudden feeling of warmth that is usually most intense over the chest, neck, and face. The duration is variable but usually lasts between 5 to 10 minutes. It is often followed by profuse sweating and chills. Women with surgical menopause tend to experience more severe hot flushes. Vasomotor symptoms tend to peak in the late menopausal transition.

Vaginal dryness

Vaginal dryness continues to increase after menopause. Prevalence ranges from 27-55%.

Derangement in menstrual cycle

This is probably the most common symptom that brings a woman to see a doctor. These include short or missed cycles, etc.

Affective disorders

Most studies report no association between menopausal stage and mood symptoms, or development of mental disorder; psychosocial problems are the usual causes. Prevalence is between 20-30%.

Sleep disturbances

Sleep disturbances are experienced by many women during menopause transition and may be aggravated by vasomotor symptoms and is said to affect 30-40% of women.

Somatic symptoms

Several studies in the Southeast Asian region showed that generalised aches and pain are quite common in this region affecting between 45 to 52%^{1,2,3}.

Sexuality issues

As much as 40% of women have decreased libido, which is aggravated by vaginal dryness.

ANG SENG BIN, Resident Physician, Ambulatory Geriatric Service, KK Women's and Children's Hospital

TEOH SENG HIN, Visiting Consultant, Menopause Unit, KK Women's and Children's Hospital

CAROL TAN-GOH, Senior Consultant, Ambulatory Geriatric Service, KK Women's and Children's Hospital

The STRAW staging system

	Final Menstrual Period (FMP)							
<i>Stages:</i>	-5	-4	-3	-2	-1	0	+1	+2
<i>Terminology:</i>	Reproductive			Menopausal Transition		Postmenopause		
	Early	Peak	Late	Early	Late*	Early*		Late
				Perimenopause				
<i>Duration of Stage:</i>	variable			variable		a) 1 yr	b) 4 yrs	until demise
<i>Menstrual Cycles:</i>	variable to regular	regular		variable cycle length (>7 days different from normal)	≥2 skipped cycles and an interval of amenorrhea (≥60 days)		none	
<i>Endocrine:</i>	normal FSH		↑ FSH	↑ FSH		↑ FSH		

*Stages must finally be characterized by vasomotor symptoms

↑ = increased

Soules. Executive Summary of STRAW. Fertil Steril 2001.

EVALUATION

Exclude other medical causes that can mimic menopausal symptoms through careful history taking, physical examination and laboratory tests if needed.

Use this opportunity to screen for other chronic diseases prevalent at this age group. These include fasting blood sugar, fasting lipids, PAP smear, and mammography, according to National Guidelines.

MANAGEMENT

Contraception

Pregnancy is still possible during the perimenopause and contraceptive advice should be given as required.

Treatment of menopausal symptoms

Lifestyle modifications should be advised in all affected woman. These include :

- Avoiding triggers like hot drinks, spicy food, caffeine, cigarette smoking, etc.
- Regular exercise for stress reduction and to improve sleep.
- Staying cool using a fan or lowering the ambient temperature by using an air-conditioner and dressing in layers, drinking cold water during hot flushes.

Alternative therapies

There is no conclusive evidence that black cohosh, dong quai, evening primrose oil, ginseng are more effective than placebo. It should be noted that placebo effect could sometimes be as high as 40%⁹.

Hormone therapy

Indications

- Moderate-to-severe vasomotor symptoms (systemic HT). Start at the lowest effective dose for the shortest duration consistent with treatment goals.

- Urogenital symptoms - systemic or topical oestrogen (systemic HT may however worsen urinary incontinence).

Contraindications to Hormone therapy

- Pregnancy or undiagnosed abnormal vaginal bleeding.
- Past history of breast cancer or endometrial cancer.
- Active liver disease.
- History of thromboembolic disease.
- Known coronary heart disease.
- Active gallbladder disease.
- History of migraine headaches.
- Elevated triglycerides. Oral HT contraindicated but transdermal preparations may be used.
- Strong family history of breast cancer (more than one first degree relative affected).

The decision to start HT should involve the patient by clarifying the patient's values, priorities, and expectations, so that she may be able to balance the potential benefits and risks of HT that are unique to her.

RISKS AND ROLE OF HORMONE THERAPY AFTER WHI

Breast Cancer

Continuous combined HT (oestrogen and progestogen) has a small but significant increased risk of breast cancer (41 per 10,000 woman years compared to 33 per 10,000 woman years in the placebo group). The increased risk was observed after 5 years of treatment and disappeared several years after discontinuing therapy.

Estrogen only treatment for 7 years in women who have had a hysterectomy was associated with no increased risk of invasive breast cancer. There were 26 per 10,000 woman years in the treated group compared to 33 per 10,000 woman years in the placebo group.

Coronary Heart Disease(CHD)

Although WHI showed a small but statistically nonsignificant increase in CHD risk with combined HT, the population of woman in the study was older (mean age of 63 years old) and largely free of menopausal symptoms. Subanalyses of data from WHI showed that CHD risk might be reduced with hormone use in younger women and in women closer to the menopause.

Nevertheless, HT should not be used for primary or secondary prevention of CHD until more studies are done.

Venous Thromboembolic events (VTE)

In WHI oral HT increased the risk of VTE. Transdermal estrogen did not increase the risk of VTE as shown in the ESTHER study⁷.

Stroke

HT increased the risk of ischaemic stroke in postmenopausal women and hence, there is no role for using HT for primary or secondary prevention.

Dementia

There is no role for HT in the prevention of treatment or dementia. In the WHI Memory Study (WHIMS), HT increased the risk of probable dementia in women aged 65 years and older.

Osteoporosis

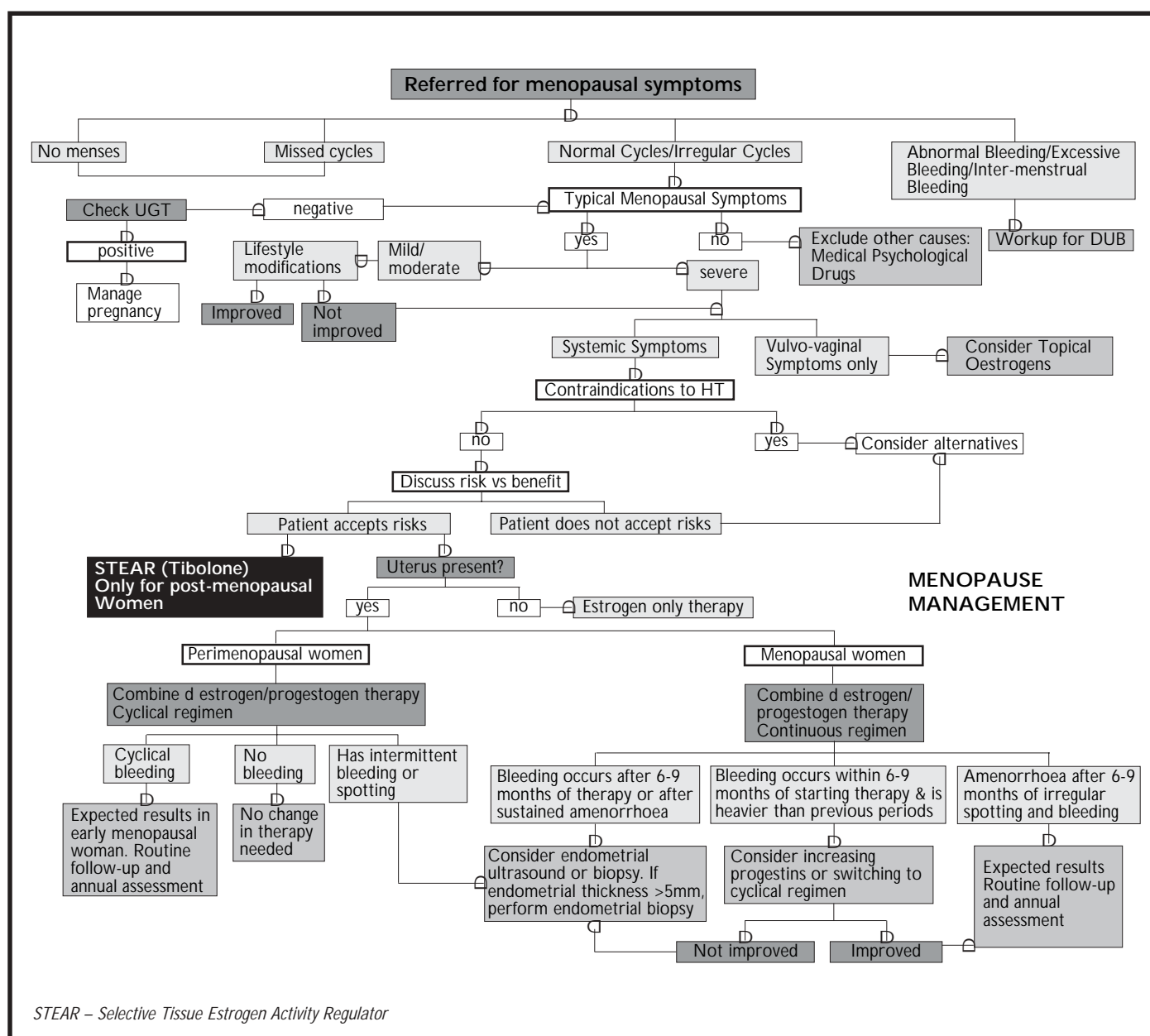
HT cannot be recommended as a first line therapy for prevention and treatment of osteoporosis, except in women with moderate to severe menopausal symptoms.

CONCLUSIONS

After the WHI, there is still a role for HT in selected women with distressing symptoms. We would need to individualise treatment of menopausal symptoms and menopause-associated symptoms so that we can help tide women through this transition with a holistic and team-based approach. It is also an opportune time to educate and screen them for chronic diseases and assist them to age gracefully for the next third of their life.

Alternatives to HT

Symptoms	Alternative	Comments
Hot Flushes	SSRI's	Paroxetine showed improvement over placebo. Fluoxetine showed improvement over breast cancer survivors. If effective, SSRIs typically provide immediate relief
	SNRI's	Venlafaxine showed improvement over placebo in breast cancer survival
	Gabapentin	Showed improvement among breast cancer survivor and those without breast cancer
	Clonidine	Mixed results
	High Dose Progestin	Medroxyprogesterone acetate 20mg daily and Megestrol 20mg twice daily showed improvements
	Phytoestrogens	Inconsistent results
	Black Cohosh	No significant improvement over placebo. Safety data for use beyond 6 months not known.
	Vitamin E 400 IU	Not found to be useful in several studies
	Lifestyle Modifications	Exercise, lighter clothing, sleeping in cooler room, dressing in layers, stress reduction. Avoid triggers like spicy foods, caffeine, smoking and alcohol.
Osteoporosis	Bisphosphonates	Used for treatment of osteoporosis and prevention both vertebral and hip fractures
	Selective Estrogen Reuptake Modulators	Used for treating osteoporosis and prevention of spine fracture in postmenopausal women. Risk of venous thrombosis. Can trigger hot flushes in perimenopausal women. No effect on non-vertebral fractures.
	Calcitonin	Nasal spray inhibits bone resorption and reduces spinal fractures only.
	Parathyroid hormone (Forteow)	Daily subcutaneous injections. Marked increase in bone formation and fracture reductions. Sarcoma development in animal models.
	Lifestyle and dietary changes	Adequate calcium intake, regular weight bearing exercise, stop smoking and avoid excessive alcohol intake.
Cardiovascular Disease Prevention	Treatment of cardiovascular risk factor	Treat risk factors like hypertension, hypercholesterolaemia, diabetes mellitus, obesity
	Lifestyle modications	Dietary advice, exercise, stop smoking



REFERENCES

1. Loh FH, Khin LW, Saw SM, Lee JJ, Gu K. The age of menopause and the menopause transition in a multiracial population: a nationwide Singapore study. *Maturitas*. 2005 Nov-Dec;52(3-4):169-80.
2. Chim H, Tan BH, Ang CC, Chew EM, Chong YS, Saw SM. The prevalence of menopausal symptoms in a community in Singapore. *Maturitas*. 2002 Apr 25;41(4):275-82.
3. Damodaran P, Subramaniam R, Omar SZ, Nadkarni P, Paramsothy M. Profile of a Menopause Clinic in an Urban Population in Malaysia. *Singapore Med J* 2000 Vol 41(9) : 431-5.
4. Lam PM, Leung TN, Haines C, Chung TK. Climacteric symptoms and knowledge about hormone replacement therapy among Hong Kong Chinese women aged 40-60 years. *Maturitas*. 2003 Jun 30;45(2):99-107.
5. Pan HA, Wu MH, Hsu CC, Yao BL, Huang KE. The perception of menopause and climacteric among women in Taiwan. *Maturitas* 41:269-74, 2002.
6. McCarthy T. The Prevalence of symptoms in menopausal women in the Far East Singapore Segment. *Maturitas* 1994;19:199-204.
7. Canonico et al. Hormone Therapy and Venous Thromboembolism Among Postmenopausal women. *Circulation* Feb 2007;115:840-5.
8. Michelle P. Warren. Historical Perspectives in Postmenopausal Hormone Therapy: Defining the Right Dose and Duration. *Mayo Proceedings* Feb 2007;82(2):219-26.
9. Newton KM, Reed SD, Grothaus L, Ehrlich K, Guiltinan J, Ludman E, Lacroix AZ. The Herbal Alternatives for Menopause (HALT) Study: background and study design. *Ann Intern Med*. 2006 Dec 19; 145(12):869-79. <http://www.annals.org/cgi/content/full/145/12/869>
10. Menopause and hormone therapy (HT): collaborative decision making and management. National Guideline Clearing House. Release 1999 (updated Oct 2006). http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=10038
11. Michael R. Soules, Sherry Sherman, Estella Parrott, Robert Rebar, Nanette Santoro, Wulf Utian, Nancy Woods. Executive Summary: Stages of Reproductive Aging Workshop (STRAW). *Fertility and Sterility* Vol. 76, No. 5 Nov 2001.