I 13 (PL 2)

Health Promotion Strategies for Menopausal Thai Women : Action Research in Process

Suwipa Punyahotra*, Annette Street**

This paper will describe the principles and strategies which have resulted in an effective holistic health promotion strategy for mid-life Thai women. This strategy was developed using a participatory action research process which enabled menopausal women and health workers to collaborate at a grassroots level to design and evaluate health promotion program. The initial project was conducted at the Royal Irrigation Hospital where the principles informing the health promotion strategy were formulated. These principles were then tested in a second PAR project in the medical unit of the Royal Irrigation Department, Bangkok. The findings are consisted of the literature on well being and suggest that this health promotion strategy could greatly enhance the health of menopausal Thai women.

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Plenary lecture - Friday

I 14 (PL 2)

Confucian Ideology and Women's Life after Menopause

Won-whe Kim, M.D., Ph.D*

Idea of predominance of men over women in our part of the world is probably not directly from Confucian ideology. Confucius himself had a good touch of humanity to insist equal love or benevolence as a perfect virtue. In his teaching, he asked to bring men to a right mode of life, and a respect for the teaching of the wise men of old. But he has removed many important values, human basic instincts, and replaced with several abstract nouns such as loyalty, filial piety, benevolence, faith, justice, etc. These are, of course, important values but somehow effected to the equal rights for men and women. Basic principles in his teaching, though all is not made by him, can be easily understood in so-called 'the three fundamental principles' and 'the five moral disciplines in human relations'. These include that' a husband is the basis of his wife and that' there is distinct differences between husband and wife'. Women's duty and conditions to be driven out are as follows: Three rules of obedience for women: 1. To obey to her father before marriage, 2. To obey to her husband after marriage, 3. To obey to her son after her husband's death and Seven valid causes to divorce one's wife: 1. Not obeying to her parents-in-law, 2. No son, 3. Dissipation, 4. Jealousy, 5. Bad illness, 6. Talking too much, 7. Stealing.

For thousands of years in Far-East countries including China, Korea and Japan, this male dominant idea was the rule. Women were only to raise their children, support their family in many ways including not only ordinary house works but also hard labor in agriculturing. In noble family, women had to remain single after widowed. Every woman is expected to carry an ornamental silver knife to kill herself in case of danger of being raped. On the other hand, a man can have more than one wife if he can afford, and can enjoy extramarital affairs with various professionals. Women are encouraged not to have formal education. In Korea, they were only allowed to learn "Hangul", easy Korean letters, while most boys start to learn Chinese letters from about age of five. These are just small examples of what you can understand women's life before western culture started to change whole thing. There was nothing to be privileged by being a woman or being old women. For them asking for any

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social or political rights was only a luxury. But 'the younger should obey to the older' was fortunately included among those five disciplines. When old, they could have much easier life. Sometimes she did have completely different life after she had several daughters-in-law. Her life after menopause probably had been improved through them.

There is old saying that widows and women with sexless life have only full of Ying and will staggle for Yang. They feel weak and dizzy, dislike wind, feel hot flushes and easily frightens. This 'only Ying but no Yang syndrome' was tried to be treated by various herb drugs. Yet the cure seldom followed. It was believed that this kind of women's trouble is more than ten times difficult to treat than that in men because women are more sensitive and have more hate, jealousy, passion or sorrow.

Considering these facts, situation of women's life and sex of the past and present as well as east and west will be compared.

In conclusion, the postmenopausal symptoms were believed to be from lack of Yang and the treatment was mainly focused to reduce the power of Ying through medication. Remarriage or getting a boyfriend to supply the power of Yang was not at all considered under the Confucian ideology.

Plenary lecture - Friday

I 15 (PL 3)

Prophylactic Ovariectomy in the Periclimacteric Woman : To Do Or Not To Do?

Winfried G. Rossmanith*

Ovarian cancer affects one in every 70 women and represents the fifth leading cause of cancer deaths in females. To avoid the ravages of this disease, prophylactic bilateral ovariectomy has generally been recommended for periclimacteric women. This procedure has been routinely performed at elective lower abdominal surgery, in particular at hysterectomies for benign reasons. Prophylactic ovariectomy may be a primary indication for a small group of climacteric women with an inherited or individual high risk of developing ovarian cancer, or as an additional therapeutic tool for women with hormone-dependent cancers. Epithelial ovarian cancer has been reported to occur in 4-14% of women who had previously undergone hysterectomy after age 40. An additional 5-10% of women will undergo ovariectomy for benign disease. Thus, the majority of these surgical interventions could have been prevented by prophylactic ovariectomy at the time of the proceeding surgery. Conversely, the perception opposing routine prophylactic ovariectomy at a given age comprises considerations on the changes in the body image and the consequences of the surgically induced menopause. Sequelae of hypoestrogenism include osteoporosis and cardiovascular aging and require prevention by long-term hormonal replacement. This regimen may expose women to potential hazards such as the development of hormone sensitive malignancies. In addition, the impact of residual ovarian function even after onset of menopause, such as continuous production of androgens, on various targets organs (bone, brain) still remains to be resolved. In considering the progress in individualized hormone replacement therapy, we propose that prophylactic ovariectomy may be generously advised to women after age 45 at the time of pelvic surgery. However, the decision to electively remove healthy organs will so long impose a burden on both the patient and her physician, as not all consequences of such a proposition are thoroughly explored.

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I 16 (PL 3)

Premature Ovarian Failure

J. Donnez*

Approximately one per cent of women under the age of 40 develop early menopause, also called premature ovarian failure (POF).

Case of Early Menopause: Early menopause may occur due to genetic factors, autoimmune disorders, or destruction of the ovaries by radiation therapy, chemotherapy, surgery, toxins, or unknown factors. Each of these situations results in depletion of eggs and reduction of estrogen and progesterone production by the ovaries.

Genetic Factors: In Turner's Syndrome, the female is born with only one X chromosome. The ovaries are small, do not contain eggs, and do not produce estrogen. Women with Turner's Syndrome usually need to take estrogen to develop breasts and have menstrual periods.

Autoimmune Disorders: Occasionally, the immune system mistakenly attacks its own cells. This is called an autoimmune disorder. Some women with autoimmune disorders form antibodies that attack their own ovaries. These antibodies damage to ovaries and destroy eggs, resulting in early menopause. Some of the autoimmune diseases that may be associated with early menopause include Addison's disease, Myasthenia Gravis, Rheumatoid arthritis, Systemic Lupus Erythematosus and certain types of diseases of the thyroid and parathyroid glands.

Destruction of the Ovaries: The ovaries may be damaged or destroyed by radiation therapy, chemotherapy, surgery, or certain reproductive tract infections. The amount of radiation normally associated with diagnostic X-rays that a woman receives during the course of her life will not cause early menopause. Very high amounts of radiation used to stop the growth of cancer cells can destroy the ovaries and result in early menopause. Many of the chemotherapeutic medications used to destroy cancer cells may also destroy normal cells, such as eggs within the ovaries.

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Unknown Factors: In up to half of all women with early menopause, no clear cause is identified. This is called idiopathic early menopause.

Summary: Early menopause may mean experiencing the symptoms of menopause earlier than expected, but medical advances, combined with adequate diet and exercise, can treat these symptoms and help patients maintain good health. With the aid of today's assisted reproductive technologies, many women with early menopause can experience the joys of pregnancy and childbirth.

Special lecture - Friday

I 17 (SP 2)

The Beauty of Menopause. A Colorful Microworld of Images

P.M. Motta*

For many centuries microscopists have been intrigued with puzzling events of the changing organs of the female reproductive tract. As new techniques are introduced the investigative process must be repeated in order to have a more exact picture of the reproduction features.

Due to a rapid development in imaging technologies - which integrate high resolution scanning and transmission electron microscopy with computerized analysis - nowadays real three dimensional microanatomical images of tissues and cells components clearly revealed new fundamental insights in great details.

When these methods are applied to study the cycling organs of the woman's reproductive organs original unexpected microtopographical dynamic views are disclosed which can be easily coupled with concurrent biochemical and physiopathological data.

Microimages of the most relevant aspects of the woman's reproductive tract with reference to the process of menopause are reviewed and updated in this lecture in a colorful dynamic fashion.

These pictures compared to parallel cycling, aging and relevant pathological cases offer the unique opportunity to clearly evaluate the real significance of basic physiopathological cellular events in reproduction.

In conclusion, these images, allowing a more precise clinical evidence of various menopause dynamics, are likely to help much the gynecologist in the selection of the most appropriate therapy to improve the health and the quality of the woman's life.

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Minilecture - Friday

I 18 (Ratanakosin)

Percutaneous *Versus* Oral Hormone Replacement Therapy

E. Boschitsch*

The benefits of hormone replacement therapy (HRT) include relief from climacteric and urogenital symptoms, and prevention of osteoporosis and cardiovascular disease. These effects are similar for orally and parenterally administered hormone preparations. However, oral administration may cause hepatic metabolic disturbances, i.e. decrease of anti-thrombin III and increase of angiotensinogen and triglycerides. Oral HRT provokes serum estrogen fluctuations and an unphysiological high ratio of estrone (E1) : estradiol (E2).

Other routes of administration, bypassing the liver, cause less metabolic alterations. The use of percutaneously applied estradiol-gel results in a natural relation of estrogen metabolites similar to the premenopausal state.

In a prospective observational study three treatment regimens containing estradiol-gel have been compared. One hundred and sixty-six postmenopausal women received either estrogen monotherapy or estrogen + progesterone sequentially or continuously combined to evaluate acceptance and efficacy.

Efficacy has been determined through a rating-score for climacteric symptoms, the assessments of E2 serum concentrations and bone mineral density.

In addition, factors such as adaptation of dosage, duration of therapy, skin tolerance, side effects, irregular bleeding, and the request to change or stop medication have been assessed. Our goal was to find out whether acceptance and compliance can be improved by adaptation of the estrogen- and the progesterone-dose according individual needs.

The results have proven all three treatment regimens to be effective in the treatment of climacteric symptoms as well as in elevating E2 serum concentration to therapeutic, osteoprotective levels.

Due to the convenient adaptation of the estrogen-dose, side effects can be notably reduced and the patients acceptance improved.

* Ambulatorium KLIMAX, Vienna, Austria

Minilecture - Friday

I 19 (Ratanakosin)

The Role of Progestins in HRT

R. Druckmann*, J.Ruby*

Usage and acceptance of HRT increased significantly during the last years in most of the european countries, due to improved awareness among patients and prescribers about the added value of this therapy form beside the relief of typical climacteric symptoms. Nevertheless the unsatisfactory compliance with regard to long-term use and the often undifferentiated prescription of HRT- products without consideration of individual patient needs or risk profiles are still lasting problems. In order to achieve a maximum benefit of HRT in prevention of osteoporosis, cardiovascular diseases or possibly even Alzheimer type dementia, efforts should be made to improve long-term use of HRT -products. Especially the differential side effect profile among the available progestin components is still a much to less considered aspect. In contrary to this, a lot of data published during the last years, indicate partial significant difference in the side-effect profile among available progestins which may be of therapeutic relevance. Different influences on central nervous functions which may result in fatigue or depressive disorders should be considered in order to improve long-term compliance. Even more important may be date which indicate a different risk profile as far as serum lipids and influence on the cardiovascular system are concerned. Summarizing these data the usage of progesterone-derivatives should be preferred instead of 19-nortestosterone derivatives. Also taken into account the limitations in transferring these data resulting predominantly from *in-vitro* or clinical studies on the complex system of the human organism, just this limitation is the most important argument to recommend individual solutions closely related to nature. The climacteric period usually starts with luteal deficiency and the selection of the adequate progestin should be done with great care, in order to avoid side-effects which may lead to an unsatisfying compliance. Taking this into account, modern hormone replacement therapy should focus on the progestin component or in other words : HRT should be understood as progestin administration plus an addition of estrogens.

* Anemo Menopause Center, Nice, France

Minilecture - Friday

I 20 (Ratanakosin)

Which Men Over 50 Years May Benefit From Androgen Replacement Therapy (ART)?

Bruno de Lignieres*

Male aging coincides on average with a progressive impairment in testicular function characterized by an increase in sex hormone binding globulin (SHBG), a decrease in non SHBG bound testosterone and a relative increases in testosterone aromatization. A drop in androgen stimulation is likely to have unfavorable consequences on muscle, adipose tissue, bone, hematopoiesis, mood and sexual function and might be treated by an appropriate hormone substitution. However the biological and clinical characteristics of men likely to benefit from ART are far from being identified. 272 men, aged 50 and over, (mean age 63 years old) self-selected on "andropause" symptoms, have been investigated in an endocrine unit. The main symptoms, attributed to "andropause" have been mood disturbances, asthenia, erectile dysfunction, decrease in muscle mass, weight gain and urinary problems. No one was having any severe cardio-vascular or prostatic disease. The same ART has been proposed to all of them. 46 has been discouraged by an other practitioner to use the treatment. From the remaining : 226 patients, 132 (58%) were stopping the treatment within the next 6 months because of insufficient efficacy.

For 94 (42%) the treatment was effective and followed during the next 2.5 years. The baseline characteristics of the patients getting or not getting improvement were signifcantly different. The men over 50 more likely to benefit from ART, have a serum SHBG in the premenopausal female range, and/or a total testosterone below 3.5 ng/ml, and/or an estradiol in the premenopausal female range. Their perceived incidence of nocturnal penile tumescence is decreased and they complain about physical and psychological asthenia.

* Service d'Endocrinologie et Médecine de la Reproduction Hopial Necker-Paris

Minilecture - Friday

I 21 (Thonburi)

Vitamin D Metabolites in Prophylaxis and Treatment of Osteoporosis

M.A. Dambacher*, E. Schacht*, R. Kissling*

There is no study, which proves a reduction of spine fractures in patients with manifest osteoporosis treated with native vitamin D. In contrast to this the studies of Tilyard, Gallagher, Orimo, Skiraki and Pouilles have shown an effect of vitamin D metabolites on bone mineral density on fracture rates. Worldwide (see the 19th annual Meeting of the American Society for Bone and Mineral Research in Cincinnati, September 1997) patients with osteoporosis now are divided in patients with high and low bone turnover, postmenopausal this is identical with fast and slow loser patients. In fast bone losers with have used until now antiresorptive agents such as estrogens, calcitonin and bisphosphonates. Fast losers are defined as patients who lose more than 3% trabecular bone density in the radius calculated for one year. The question arises, whether vitamin D metabolites are also effective as antiresorptive substances in fast bone losers.

To answer this question we use the high precise peripheral quantitative computed tomography system DENSISCAN 1000 (Scanco-Medical, Zurich, Switzerland), which has an excellent reproducibility in mixed collectives of 0.3%. We shown that alphacalcidol 1 µg/day and calcitriol 0.5 µg/day for 8-21 months are highly effective in reducing the fast trabecular bone loss in postmenopausal osteopenic and osteoporotic women.

Furthermore we have proved that the lower the trabecular bone density is the higher the relative bone loss, probably due to augmented trabecular surface. e.g. in patients with the lowest bone density (57-99 mg/ccm) we find in 75% a fast loser state. Based on this data it is justified to use vitamin D metabolites not only perimenopausal instead of estrogens but also in severe osteoporosis with low bone density.

In our patients we have observed an impressing improvement of well-being (less pain, more muscle strenght, more energy) possibly due to an estrogen-like effect of vitamin D metabolites: some of our patients informed us that her breasts have grown remarkably.

Ref.: Dambacher M.A., Schacht E.: Vitamin D Metabolites, A view into the future, Basel (Switzerland), Eular Ed., 1996

* University of Zurich/Switzerland

Minilecture - Friday

I 22 (Thonburi)

Micronutrients and Bone Health

Denis V. Barclay, Ph.D.*

Osteoporosis is an increasing public health problem world wide, resulting partly from increased life expectancy and changing life styles. Women are at the highest risk for osteoporosis due to accelerated bone loss in the early postmenopausal period, and also to their greater life expectancy. Bone mass throughout the life span is determined by genetic and environmental factors, including the dietary intakes of calcium, vitamin D and other micronutrients. Attainment of peak bone mass before adulthood is of major importance in the prevention of osteoporosis in later life. Studies have shown that adequate dietary calcium intake during the bone accretion period is important for the attainment of maximal peak bone mass, and also for the prevention of excessive bone loss after early adulthood. More recently, a study in pre-pubertal girls showed that the consumption of calcium-fortified foods significantly increased bone density at some skeletal sites; the increase was most marked in subjects with low spontaneous dietary calcium intake, and was maintained one year after cessation of consumption of the calcium-fortified foods.

Furthermore, intake of calcium from food sources is associated with a lower risk of kidney stone formation in women, which is not the case for supplemental calcium tablets. The chemical form of calcium used to fortify foods has only limited effect on the bioavailability of the added calcium. Whilst single-meal studies have indicated that dietary calcium may inhibit the absorption of dietary iron, recent data from a chronic intake study have shown no such significant inhibition. Thus calcium-fortified foods can play an important role in the prevention of osteoporosis throughout the life span, especially for persons with inadequate spontaneous dietary calcium intake, without having adverse effects on health.

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Minilecture - Friday

I 23 (Thonburi)

Aspects of Etiology, Potential Risk and Other Susceptible Factors in Hormone Dependent Cancer

S. Jirecek*, M.Sator*, R.Lehner*, D.Gruber*, F.Wieser*, M.Metka*, J.Huber*

Epidemiologic evidence on the relation between nutrition and hormone dependent cancers (e.g. breast and endometrium cancer) are reviewed in many studies. So many aspects of the role of diet are still unclear. Only genetic relations seem to be proved.

Other items, like age at menarche, parity and age at first birth are discussed controversially.

Concerning age at first birth, animal at models show an association between early full term pregnancy and a reduction in the life time risk of developing breast cancer.

On the other hand some case control studies suppose a possible influence of diet, rich on phytoestrogens, on estrogen metabolism.

In summary all these statements must be priorities for further investigations.

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Minilecture - Friday

I 24 (Ayuthya)

Outpatient Hysteroscopy for the Investigation of Postmenopausal Bleeding

F. Wieser*, C. Kurz*, R. Wenzl*, A. Albrecht *, C. Huber*, F. Nagele*

Almost 70% of all gynaecological consultation in postmenopausal women are related to abnormal bleeding (AUB). Because of the increased risk of endometrial malignancy in this age group, direct visualisation of the uterine cavity is mandatory. Hence, hysteroscopy is subsequently replacing traditional dilatation and curettage (D&C), offering patients the dual advantages of its greater diagnostic accuracy while still being an outpatient procedure. In contrast to the widespread experience with this procedure in unselected series, there is relatively little data on its use in postmenopausal patients complaining of AUB.

In this study we report on our experience and the outcome in 400 patients who were referred to our outpatient hysteroscopic clinic within the last 6 years. Postmenopausal bleeding was defined as bleeding >1 year after cessation of menses. The mean age was 58.4 (range 40-86) and 188 women (47.0%) were receiving HRT. Hysteroscopies were performed using a standard 5.0 mm hysteroscope with a 30° fore-oblique lens and the uterine cavity was distended with N/saline at a pressure of 100-150 mm Hg. Local anaesthesia was administered if necessary, and endometrial biopsies performed if indicated.

Hysteroscopy could be completed successfully in 374 patients (93.5%) and intrauterine pathology was diagnosed in 52.0%. Common abnormalities included mainly endometrial polyps in 20.0% and fibroids in 14%. There were 12 cases of endometrial cancer, none of them missed at hysteroscopy. Functional endometrium was diagnosed singificantly more often with HRT, and endometrial atrophy with pure postmenopausal bleeding. Local anaesthesia was required in 154 (38.5%) cases. Endometrial biopsy was attempted in 283 cases (70.75%), but failed to produce sufficient tissue for complete histologic examination in 9.9% (28/283).

Outpatient hysteroscopy should become the investigation of choice in patients with postmenopausal bleeding. The high rate of unsuccessful biopsy in such patients questions its routine use in an otherwise hysteroscopically normal uterine cavity.

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Minilecture - Friday

I 25 (Ayuthya)

Thermal Balloon Endometrial Ablation in Perimenopausal Bleeding Disorders

G. Freude*, S. Leodolter*, P. Mahrhofer*, P. Sevelda*

In recurrent perimenopausal bleeding which cannot be treated successfully with hormonal therapy, hysteroscopic endometrial ablation has developed as common surgical treatment. Now a new technique for Endometrial Ablation with a Thermal Balloon is available. Two different Thermal systems are introduced (Cavaterm, Gynecare) and described in detail. 10 patients with recurrent metrorrhagia climacterica were treated with Cavaterm, 10 patients with Gynecare. Before performing the Balloon Treatment all patients underwent diagnostic hysteroscopy and endometrial biopsy to exclude intrauterine pathology. In a follow up of 2 and 6 months after Thermal Ablation we evaluate the bleeding patterns as well as the endometrial status by vaginal ultrasound and the satisfaction of the patients. The efficiency of the Balloon Technique seems to be equivalent to hysteroscopic endometrial ablation using electrosurgery.

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Minilecture - Friday

I 26 (Ayuthya)

Ultrasound Monitoring in Menopause

G. Freude*, S. Leodolter*, P. Mahrhofer*, P. Sevelda*

Women in industrialized countries may spend about some 30 years in menopause, which means 40% of their life. Ultrasound scanning of the pelvis permits to view the ovaries and the uterus with the endometrium. Vaginal ultrasound (TVS) examination has become a technique that is well accepted by menopausal women.

The menopausal ovaries appear in transvaginal sonography (TVS) are small uniform hypoechoic ellipsoid structures without follicles. The size of the ovary does not exceed more than 2 cm in its largest diameter. The visualisation rate of the ovaries decrease with the menopausal age. Adnexal masses can be easily examined by ultrasound. Unilocular anechoic cysts should be re-evaluated. They carry a low risk of malignancy and should be removed, if such a cyst persists more than one year.

The involution of the menopausal uterus is slower than the ovaries. The cervix/corpus ratio increases. Inhomogenicity and cystic structures represent myometrial degeneration and hyperechogenic spots are the result of calcification

The double layer thickness of the endometrium should be measured and the integrity of the subendometrial hypoechogenic halo. The mean endometrial thickness is related to the length of time since the menopause. TVS is considered useful for identifying endometrial malignancies, but it has a low specificity and high false positive rate. Intrauterine fluid collection occurs as a result of senile cervical stenosis, but larger amounts (>4 mm) can also be associated with endometrial cancer.

If a HRT is given, the thickness of the endometrium is depending on the HRT regimen.

Ultrasound scans reflect the hormonal status in the menopause depending on menopausal age and hormonal therapy.

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I 27 (Chiang Mai)

Steroidreceptors in Synovial Joints?

R.Schabus*, G.Holzer*, M.Metka*, B.Schurz*

Among the variety of symptoms of the postmenopausal syndrome, joint pain seems to be an important problem for the patient as well as for her doctor. Because of the excellent response of the hormone substitution therapy it is asked if the synovial membrane is a target organ for oestradiol.

Biopsies from the knee joint of ten women (not having any hormone therapy) excised during arthroscopic knee joint surgery were examined. Only in two cases oestrogen receptors were found.

Accordingly the synovial membrane cannot seen as a direct target organ for oestradiol and so other mechanisms must play a role in the pathogenesis of postmenopausal joint pain.

The clinical approach to knee pain syndromes in the postmenopause and the therapeutical consequences will be presented from the view of the sporttraumatologist.

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Minilecture - Friday

I 28 (Chiang Mai)

Psychosocial Factors Associated with Mood Change and Symptoms During Transition to Menopause

A. Collins*, B.M. Landgren**

Menopause is associated with biological and psychosocial changes affecting women's health. The aim of the study was to examine mood change and experience of symptoms and to identify factors associated with these symptoms during transition to menopause. The subjects were 150 perimenopausal women participating in a longitudinal population-based study. The women were assessed annually using health screening, psychological interviews and self-rating scales over five years. Blood samples were drawn for analysis of estradiol, progesterone, FSH and LH. The women also completed a symptom rating scale and the CES-D depression scale. They were classified as pre-, peri-or postmenpausal, or HRT users. Factor analyses of the symptom ratings yielded ten independent factors. Women who held a more positive attitude to menopause reported less negative mood change, less joint pain and less memory changes. Stepwise logistic regession analyses showed that vasomotor symptoms, memory problems and joint pain had a significant association with menopausal status. Other symptoms were more strongly related to negative attitude to menopause, physical complaints and life stress. Depression scores were significantly to a more negative attitude to menopause, worry about elderly parents, somatic complaints and menopausal status. Vasomotor symptoms adversely affected mood and when these were included in the regression model, menopausal status was no longer a significant predictor of depression. Women who had undergone a hysterectomy with bilateral oophorectomy were significantly more depressed than other women. The results lend support to the view of menopause as a developmental phase in women's lives and a period of increased vulnerability.

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Minilecture - Friday

I 29 (Chiang Mai)

Benign and Malignant Tumors of the Ovary in the Menopause

B. Schurz*

The incidence getting an ovarian tumor at the age of 50 years and upward is higher than in younger women. Transvaginal ultrasound is a useful clinical tool in recognizing ovarian tumors. In menopause due to hormonal imbalances between estrogen and progesterone production the development of hormonal cysts like corpus luteum cysts increase. With ultrasound and especially with color flow imaging it is possible to verify between hormonal and other tumors in the ovaries.

We examined by transvaginal ultrasound and color flow imaging the impedance to blood flow in 120 ovarian tumors before exploratory laparotomy. The benign and malignant ovarian tumors were confirmed by histopathologic examination. In malignant ovarian tumors we could detect always intratumoral blood vessels demonstrating low impedance to flow. The pulsatility index was always below 1.

With ultrasound and especially with color flow imaging it is possible to differentiate between benign and malignant tumors.

In one way unnecessary operation in hormonal cysts can be avoided and in the other way a benign and a malignant tumor can easily be seen by transvaginal ultrasound in combination with color flow imaging and the indication for operation can be set up very early.

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Seminar/Symposium - Friday

I 30 (Sem/Sympo 3)

Oriental Medicine in Japan

Takumi Yanaihara, M.D.*

Traditional Herb Medicine (Kampo) has a long history and has been used widely in Japan for the therapeutic purpose for various disorders. A survey of the use of Kampo to 2,500 gynecologists resulted in 67% of them were prescribing Kampo., mainly for menopausal syndrome. To date, more than 140 formulae have been approved for clinical use in Japan. These formulae were prescribed according to the patient's "Sho", conceptual classification of mental and physical conditions based on criteria such as Yin and Yang. Tokishakuyakusan (TJ-23), Kamishoyosan (TJ-24), Keishibukuryogan (TJ-25) and Nyoshinsan (TJ-67) are most used formulae for menopausal disorders. Various clinical effects of Kampo on climacteric disorders have been reported. The climacteric symptoms evaluated by Kupperman Index improved in many cases. Especially in those patients who complained of depression and those who were not responded to HRT, were treated by TJ-68. A significant improvement of SDS (self-rating depression scale), STAI (state-trait anxiety inventory) score was noticed. In animal studies, some of the Kampo formulae showed the effectiveness on freezing behavior and sleeping time induced by conditioned-fear stress.

Although Kampo medicine has unique concepts from those of Western medicine, and a scientific experiments has to be studied, it may can provide a variety of clinically beneficial effect on the disorders appeared in menopausal women.

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Seminar/Symposium - Friday

I 31 (Sem/Sympo 3)

Phytoestrogens

Alfred S. Wolf*

Phytoestrogens are an actual highlight in clinical endocrinology. The main phytoestrogens are lignans (enterolacton, enterodiol) and isoflavones (genistein, daidzein, biochanin A). High concentrations of lignans and isoflavones are found in legumes like soy products, full grain wheat, seeds and berries. Phytoestrogens are weak estrogenic and partially antiestrogenic agents. They are mainly absorbed as premetabolites and transformed to active compounds by intestinal bacterias. The main biological effect of phytoestrogens is a slight increase of SHBG, replacement of estradiol from its receptor and an inhibition of tyrosinkinase, which is the main signal transductor within the growth-factors signal cascade of insulin EGF-1, EGF, PDGF and TGF-ß, in addition they act as scavengers of radicals, Phytoestrogens can decrease climacteric complaints, prevent osteoporosis and possess a high protective activity against the development of malignancies of the breast, prostate and colon. Furthermore they protect against cardiovascular diseases. Women with an increased risk for breast cancer or after breast cancer, or/and are at risk for cardiovascular diseases are recommended to consume vegetarian food or soy products of at least 30 grams per day. Endocrinologists all over the world shall quickly outline the effective potential of phytoestrogens, especially for the prevention of breast cancer.

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Seminar/Symposium - Friday

I 32 (Sym/Sympo 3)

Ginseng-Phytohormone

Yhee, Yhee-Keoung, M.D., Ph.D, M.P.H.*

Ginseng is a deciduous perennial plant which belongs to the Araliaceae family that has been cultivated and used for centuries in East Asia. In recent years it has come into wide spread use and numerous articles have been written concerning its medicinal stimulant and a phrodisiac properties. However, little attention has been paid gynecologic and sexologic properties of ginseng in medical literature. Traditionally ginseng has been used for the effective prevention and treatment of a wide number of diseases. According to the Shanghun lun written by Zhangji of the Han dynasty in China (circa 200 A.D.), ginseng was prescribed for headaches, lack of strength, fatigue, dizziness, nausea and vomiting, diarrhea, coughing, asthma, neurasthenia, uterine hemorrhage, and impotence.

Recent reports have pointed out the estrogen-like effect of ginseng on the vaginal epithelium and the possibility of abnormal bleeding caused by the use of ginseng. It has also been made into a pill or tea that is commonly prescribed by Chinese herbalists for relief of hot flushes. Other reports have showed that the use of Panax Ginseng extract results in an increase in spermatozoa number/ml and progressive oscillating motility, an increase in plasma total and free testosterone level in vivo, and also decrease prostate weight among test animals.

Korean ginseng is known to be a variety that has little or no side effects and is used to improve one's health as well as for treatment. It has been used for pharmacological purposes by private doctors for over 4,000 years. In fact, its efficiency was so superior that it was called such names as the "elixir of life", "the wonder drug", "or the panacea".

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I 33 (Sym/Sympo 4)

State of the Art in Osteoporosis : Prevention and Treatment of Osteoporosis in Asia

K Limpaphayom*

Postmenopausal osteoporosis is a major cause of mortality, morbidity and medical expense worldwide because the world population is aging. The incidence of hip fracture was also increased in most countries in Asia. The best treatment for osteoporosis is PREVENTION. Osteoporosis prevention should take place from early childhood into old age. There are exciting prospects for effective means of identifying individuals at risk and reducing their fracture risk. To meet the goal of treatment in established osteoporosis, existing bone mass must be maintained and preferably increased. High calcium diet, exercise, proscription against smoking and excess alcohol are areas in which the woman can participate. Hormone replacement therapy have still been the most effective treatment in maintaining bone density in postmenopausal women. Development and testing of newer agents are currently in progress. In current Asian situation, cost considerations will influence the use of some agents or strategies. The suitable choice of prevention and treatment should be carefully monitored and concerned about the benefits, risk and cost of each therapy.

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Seminar/Symposium - Friday

I 34 (Sem/Sympo 4)

Alternative Methods for Prevention and Treatment of Osteoporosis

Rajata Rajatanavin, M.D.*

Although estrogen is efficacious and cost-effective agent for prevention and treatment of postmenopausal osteoporosis, alternative methods are needed for those who developed side effects or had contraindications for estrogen theapy. These agents include, calcium, vitamin D, antiresorptive agents and bone forming agents.

Calcium and vitamin D are ineffective in preventing bone loss in early postmenopausal women but have been demonstrated to be efficacious in prevention of bone loss and fracture in elderly postmenopausal women who lived at home or institutionalized.

Currently, antiresorptive agents like calctionin and bisphosphonates dominate the therapy of postmenopausal osteoporosis. Calcitonin has been shown to prevent vertebral but not hip fracture. Besides etidronate, newer bisphosphonates like alendronate, tiludronate, clodronate or ibandronate are available. Data from large randomized control trials have indicated that alendronate could prevent both vertebral and hip fractures. Alendronate led to a slow but steady bone gain after 5 years of therapy. Vitamin D analogs, calcitriol and alphacalcidiol have been used in the treatment of osteoporosis. They primarily promote intestinal calcium absorption which is defective in the elderly. Benefit was more frequently observed at the spine than the hip or radius. Some studies showed that it could prevent vertebral but not hip fractures. Certain genetic factors like vitamin D receptor gene may determine the outcome of vitamin D analog therapy. Ipriflavone, an isoflavone derivative devoid of estrogenic property but active in inhibition of bone resorption has been shown to increase trabecular bone mass. Vitamin K_2 has been shown to decrease bone resorption *in vitro* and its clinical utility is now under investigation.

Regarding bone formative agents, sodium fluoride remains an unresolved issue. Recent double blind control studies have shown gain in vertebral bone mineral but no fracture reduction. Anabolic steroids like nandrolone decanoate increases bone mass but associated androgenic effect may prevent long term use. The development of parathyroid hormone analog may prove efficacious as bone formative agent in the future. Other compounds like strontium, insulin like growth factors and zeolite are under study.

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I 35 (Sem/Sympo 4)

State of the Art in Osteoporosis : Diagnosis and Treatment of Osteoporosis in Europe

Gerold Holzer*

Osteoporosis has an enormous impact on general health in European North America, which counted for half of the estimated 1.7 million hip fractures worldwide in 1990. Over the past few years there have been remarkable efforts in the diagnosis, prevention, and treatment of osteoporosis.

Diagnostic tools, such as DEXA, now widely available, are accurate and precise. Besides hormone replacement therapy and some biphosphonates other agents able to modulate the natural history of osteoporosis are showing promising results in clinical studies. Despite the increasing professional and public awareness, the management of osteoporosis has been confined mainly to specialists. Concerning the number of affected individuals and the wider availability of diagnostic aids and safe treatments, there is a need for this disease to be managed predominantly by the primary care physician. As a consequence practice guidelines for primary care physicians for the diagnosis and management of osteoporosis were published and the European Commission will launch the European Report on Osteoporosis later this year.

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Debate - Friday

I 36 (DB 2)

Male Climacteric

Markus Metka*, Irene Schmidt*

A continuous decrease of all biologic active gonadal and adrenal sexual hormones in the aging male causes physiological and psychological changes including symptoms like: decrease of well-being and energy, loss of libido, increase of body weight and fat mass, osteoporosis and a higher morbidity of cardiovascular diseases.

20% of men over 60 years present themselves with an androgen deficiency due to a decline of leydig cell and adrenal function. A low testosterone level seems to correlate with an abnormal lipid profile (HDL, ↓, LDL, ↑) and increases therefore the risk of CVD. Insulin resistance is also described due to a lack of testosterone.

Dehydroepiandrostenedione (DHEA) is produced in high quantities in the adrenal cortex. It reaches its maximum at the age of 20 and decreases then continuously. A high range of DHEA stimulates the immune system, highers muscle mass, lowers fat mass and also improves the sense of well-being, DHEA therapy in man is converted mainly in estrogens, in women in androgens.

Several recent studies show the great importance of estrogens in bone mass density and the cardiovascular system. It should be considered that a 30 years old man has higher E2-levels than a 60 years old woman.

HRT in woman is nowadays well-established - the same benefits for man can be reached by individualisation and differentiation in diagnosis and therapy.

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I 37 (DB 2)

Male Menopause : Fact or Fiction

Anek Aribarg*

With advancing age there is a decline in gonadal function in both man and woman. However the pathophysiological processes are not equivalent and cannot be simplified that they produce similar clinical symptoms and signs.

In women menopause is the signal of sudden cessation of ovarian follicle development and cyclic hormonal production. This is due to primary defect in the brain hypothalamic-pituitary axis. While in man, the primary pathophysiological defect starts gradually in the gonad with marked inter-individual variation. Attempt has been made to demonstrate the similarity of male and female decline in hormonal function and associated symptoms and signs. Subjective physical and psychological symptoms are scored to correlate with androgen level. It is doubtful whether this is valid.

Male sexual function and behaviour are complex and relate to many factors, beside sex hormone, such as nervous supply, vascular circulation, metabolism and psychological status.

Value of estrogen replacement therapy is well established in menopausal woman but our current knowledge of this issue in man is still inadequate and required further study. Furthermore adverse effects of testosterone on enlarged prostate and induction of prostatic cancer are serious. It is premature to conclude that testosterone supplement in aging man has similar benefit and worthwhile as estrogen replacement therapy in menopausal woman.

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Plenary lecture - Saturday

I 38 (PL 4)

HRT and Gynaecologic Malignancy : Breast Cancer - European Perspectives

H.P.G. Schneider, M.D, Ph.D.*

The fact that hormones play an important role in the development of a variety of cancers is supported by a substantial body of experimental, clinical and epidemiologic evidence. There are some hypotheses linking specific hormones to specific tumors in females, e.g. breast, endometrium and ovary, and to the prostate in men. Breast cancer is the most frequent spontaneous malignancy diagnosed in women of the western world. The lifetime odds ratio of breast cancer in North America was 1 in 10.6 in the late 1970 and is at present 1 : 8 while in Europe the trends are less intense. The degree of breast development and differentiation is of importance in discerning susceptibility to carcinogenesis. Pregnancy with mammogenetic differentiation results in protection of this organ from progression into a malignant phenotype. Characterization of a specific lobular morphology serves as an indicator of the level of differentiation and thus provides means by which to assess the risk of the breast epithelium to undergo neoplastic transformation when exposed to several genotoxic compounds. The regulation of growth and differentiation of the breast involves a balance between the action of the two major female sex hormones, estradiol and progesterone. There is almost clear evidence that estrogens are not considered carcinogenic. As mitogens they may not as growth promotors if malignant transformation has already occurred due to the influence of other factors. Estrogen-related pathways mainly act through binding to specific receptors. Studies of second half of the menstrual cycle. The implication of progestins in breast carcinogenesis is more complex and provides an inhibitory mechanism on cell proliferation through GI-arrest and terminal differentiation. There also is a substantial evidence for the stimulation of cell cycle progession by progestins. Very importantly, cell cycle phase-specific effects of progestins result in the maintenance of enomio DNA stability and their interaction within the GI-S-checkpoint. Human in vivo studies demonstrate that high intratissular concentrations of progesterone are able to decrease the mitotic activity of the normal lobular epithelial cells. The phenomenon of apoptosis is considered to be one of the regulatory mechanisms by which the breast cells shed at the end of each cycle. A drop of progesterone levels at the end of each cycle appears to trigger apoptosis. Progestin use with HRT varies greatly between Europe and the US. The variant properties of 19-norprogesterone derivatives (e.g. nomegestrol acetate), promegestone as well as 17-OH-

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