

SYMPOSIUM REPORT

HAMBURG, 26TH OF MAY 2005

Triggers and consequences of menopause

Prof. Dr. Wilhelm Braendle

There is a fundamental difference between human males and females in the production of sex hormones and sex cells. In females, the production of sex hormones, oestrogens and progesterones is tied to the maturation of follicles, and the follicles themselves comprise egg cells and the surrounding cells, which start to produce oestrogens and progesterones upon full maturity. The egg cells divide during the early stages of pregnancy, but only until about the 22nd week of pregnancy. After this, the number of egg cells will only decline. This means firstly, that an egg cell has the same age as the woman carrying it and secondly, the egg cells, and thus also the follicles in which hormones are formed, perish around the 50th year of life, and production of oestrogens and progesterones in the ovaries comes to an end.

In the male gender, by contrast, new sex cells and hormones are both formed continuously from puberty until the end of life. Hence, the crucial change in the production of sex hormones is present only in the female gender.

The decline in oestrogens is associated with the occurrence of various ailments and many changes, as oestrogens are important not only for the womb, vagina and reproduction, but they also have effects in nearly all organ systems. The most critical - and noticeable - effect is the occurrence of hot flushes, but other disorders are also associated with them. Thus, when there are night-time sweats, we will get sleep disturbances, leading to waking up, linked to fatigue, exhaustion, low motivation and depressive moods. And still other brain functions are linked with the effect of oestrogens. Probably this is the reason why the brain produces oestrogen itself beyond the menopause. Other large systems of the body in which the oestrogen deficit can be observed are the skin, bones and the blood vessels. Oestrogens and progesterones lend themselves to the treatment of hot flushes, on which oestrogens have the strongest effect; since occurrence of hot flushes is caused by the decline in oestrogens, oestrogen replacement is the most effective measure for the treatment of hot flushes.

About the person:

Born 1944 in Herford.

Address for correspondence:

Prof. Dr. med. W. L. Braendle

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Career:

Human medicine studies at the Universities of Tübingen and

Hamburg of 1963 to 1969.

1969: Doctorate to become Dr. of Medicine.

1969 to 1970 stint as medicinal assistant.

1970: scientific co-worker at the physiological-chemistry institute at the University of Marburg.

1971 to 1973: scientific co-worker of Specialist research fields 34 – endocrinology, Department of clinical and experimental endocrinology at the University Women's clinic, Hamburg.

1973 to 1979: scientific Assistant at the University Women's clinic, Hamburg.

1979 to 1980: Senior doctor at the Department of clinical and experimental endocrinology at the University Women's clinic, Hamburg.

1980 to 1993: Professor and Senior doctor at the department of clinical and experimental endocrinology at the University Women's clinic, Hamburg.

Since 1 Jun 1993, Director of the Department of Gynaecological endocrinology and Reproductive medicine, University Women's clinic, Hamburg.

Memberships:

Prof. Dr. Braendle is a member of numerous domestic and international professional associations, e.g. Vice-president of the German Menopause Society.

Complaints during the menopause

Recommendations and implications for medical practice

Prof. Olaf Ortmann

Hormone therapy (HT) with oestrogens and progesterones during the menopause and post-menopausally are among the most commonly-used medical treatments in gynaecological practice. The utility of HT for treating vasomotor symptoms is undisputed. There are numerous studies on other uses and the risks of HT. In the overwhelming majority of cases, these are observational studies.

Some studies raise concerns about long-term HT giving rise to many undesirable effects, but other confirm, or indeed show for the first time, favourable and preventive effects.

The climacteric syndrome: studies have shown that oestrogenic vasomotor symptoms such as hot flushes and sweating episodes can be reduced.

Urogenital atrophy: administration of oestrogens produces a decline in urogenital atrophy and symptoms such as dyspareunia, vaginal dryness and itching. A remission of urinary incontinence by administering HT has not been substantiated.

Osteoporosis: Studies have shown that HT is capable of reducing bone loss in post-menopausal women. It is effective even at low doses. In a large number of epidemiological studies, a decline in the incidence of fractures with HT was proven.

Cardiovascular disease: many extensive longitudinal observational studies have shown that HT users in both primary and secondary prevention have a lower rate of coronary accidents. However, these studies also showed that women who used hormones were quite distinct from those without HT with regard to cardiovascular risk factors, medical, demographic and socio-economic variables. An increased coronary risk was found in the WHI study. The studies have shown that HT is not suitable for secondary prevention of cardiovascular accidents.

Cerebral accidents: a meta-analysis of observational studies showed a significant increase in cerebral accidents among female HT users. This was true regardless whether the HT was currently being taken or had been used at some earlier time.

Thrombo-embolic events: use of an HT leads to an increased risk of thrombo-embolic events. The risk is highest in the first year of use.

Gall-bladder and bile-duct diseases: a series of observational studies have demonstrated an increased risk of cholecystitis among female HT users.

Breast cancer: various meta-analyses of observational studies produced different results. Case studies and cohort studies published since 1997 showed that the administration of progesterones as part of HT increased the risk of breast cancer, and possibly more substantially, compared with oestrogen therapy alone.

Endometrial cancer: administration of oestrogen on its own leads to a clearly increased risk of endometrial cancer. The risk depends on duration of therapy and the dose. After prolonged use (>10 years), the risk increases 8- to 10-fold. In sequential use of oestrogen and progesterone, a progestagen should be used at least 10 days per month of therapy; ideally 12 - 14 days. Even with a regular monthly use of a progestagen for up to 16 days in addition to oestrogen therapy, a small increase in the relative risk during long-term hormone therapy cannot be completely ruled out, according to the data currently available.

Colorectal carcinoma: Female users of HT had a reduced risk of colon cancer in a good number of observational studies.

Ovarium carcinoma: Data from observational studies produced different results on the effect of HT on the risk of ovarium cancer. Studies of more recent cohorts showed an increased risk of ovarium cancer when use of an oestrogen therapy is used over more than 10 years.

Others. The effectiveness of an HT in delaying or preventing various natural aging processes has not been demonstrated.

Recommendations on the use of HT:

HT at the climacteric menopause and post-menopausally can be deployed only where there is an existing registered indication.

A risk-benefit ratio assessment must be carried out, and a decision on treatment must be reached together with the woman seeking advice. This needs to be reviewed annually.

HT is the most effective form of medical treatment for vasomotor symptoms. It is possible to relieve associated climacteric symptoms in this way.

Vaginal, oral or parenteral administration of oestrogens is suited for the treatment and prophylaxis of urogenital atrophy.

In women who have not undergone a hysterectomy, systemic oestrogen therapy must be combined with sufficiently prolonged administration of progesterones (at least 10 days a month) at an adequate dosage.

Hysterectomised women should only be given an oestrogen monotherapy. The dose of oestrogen should be selected at the lowest possible level.

There is no convincing evidence at the present time in favour of preferring specific authorised oestrogens or progesterones intended for HT, or different methods of administration.

HT is suitable for the prevention of osteoporosis and osteoporosis related fractures. For this purpose, long-term use is required, which incurs potential risks. HT is not suitable for primary or secondary prevention of coronary heart disease or strokes.

About the person:

born 1959 at Lübeck

Career:

1978 pre-clinical studies of human medicine at Christian-Albrecht-University in Kiel

1981 clinical studies of human medicine at the Medical University of Lübeck
1985 Qualified as doctor
1985 Received doctorate with magna cum laude
1985 Engaged as scientific co-worker at the Institute for Biochemical Endocrinology at the Medical University of Lübeck
1985-86 Research posting to the USA at the National Institutes of Health, NICHD, Endocrinology and Reproduction Research Branch, Director K.J. Catt, M.D., Ph.D, supported by a postgraduate grant from the German Research community
1986 Clinical training at the Women's Clinic of the Medical University at Lübeck and continuation of scientific work
1990 Clinical training at the Women's Clinic of Philipps University, Marburg
1993 Accreditation as specialist in Women's medicine and midwifery
1993 Senior doctor at the Women's Clinic at Philipps University, Marburg
1994 Post-doctoral lecturing qualification in gynaecology and midwifery specialties
1996 Senior doctor at the Women's Clinic of the Medical University at Lübeck
1997 Further post-doctoral lecturing qualification at Medical University, Lübeck
1998 Head Senior Doctor and deputy to the Clinic Director
1999 Exceptional nomination as professor
2003 Appointment to the Teaching Chair for Women's medicine and midwifery at the University of Regensburg, Director of Clinic for Women's medicine and Midwifery at the University of Regensburg at Caritas Hospital St. Josef

Doctorate: 1982 -84 at the Institute for Biochemical Endocrinology at the Medical Teaching School, Lübeck, Supervisor: Prof. Dr. rer. nat. R. Knuppen

Post-doctoral lecturing qualification: 1994 qualification for the gynaecology and midwifery specialty and the conferring of the title Private Lecturer

Clinical specialisations:

Operative gynaecology: all methods of operative treatment of women's complaints (traditional operative procedures, minimal in-vasive surgery)

Gynaecological oncology: operative and medical therapy of breast and genital carcinomas (ovarial, endometrial and cervix carcinomas)

Gynaecological endocrinology: diagnostics and treatment of hormonal illnesses, particularly hormonal therapy during and after the "Change-of-Life" years.

Midwifery: Assistance with family births and high-risk births

Memberships:

German gynaecology and midwifery association

Study group for gynaecological endocrinology and reproductive medicine, Menopause study group

Study group for gynaecological oncology, Ovarian organ committee

German Menopause Society

German Senology Society

German Endocrinology Society

Endocrine Society USA

New York Academy of Sciences

European Society for Human Reproduction and Embryology

Honorary membership:

Turkish Fertility Society

Publications:

Author or co-author of several specialist books

Author of 87 scientific publications

Editor of the journal "Synecology and Midwifery"

Scientific prizes:

1992 Ludwig Fraenkel Prize for Study Groups, Gynæcological Endocrinology of the German Gynæcology and Midwifery Society.

1994 Poster Prize of the German Gynæcology and Midwifery Society.

1996 Organon Sponsorship prize of the German Gynæcology and Midwifery Society.

Advisory work:

Livial advisory board

Exemestan board

Co-ordinating scientific advisory body "Women's medicine plus"

Aachen: Expert at the "Insulin resistance" specialty at the Faculty of Medicine, University of Aachen

Consumption of soy is beneficial for women in the years of The Change

Prof. Mindy S. Kurzer, PhD, Director of Graduate Studies, Nutrition Dept. of Food Science and Nutrition, University of Minnesota, USA

Prof. Kurzer summed up that "Consumption of soy appears to offer important health benefits for menopausal women. Soy-isoflavones reduce hot flushes by 30–50%, after allowing for the placebo effect. A combination of soy protein and isoflavones reduces LDL cholesterol and raises HDL cholesterol. Studies indicate that soy consumption can prevent loss of bone mass in the short term. There is a need for further research to determine exactly which are the active ingredients of soy, and establish optimal forms and quantities". Thus, she recommends: "Eat two portions of soy-based foods daily."

Specifically, peri- and post-menopausal women hope to alleviate the hot flushes typical of the menopause by consuming soy and isoflavone. This is supported by a prospective study on post-menopausal Japanese women, according to which there is an inverse correlation between hot flushes and soy consumption. Participants in this study with the highest soy consumption (corresponding to 51 mg isoflavones daily) suffered from hot flushes less than half as often as participants in the study with the lowest soy consumption (corresponding to 20 mg isoflavones daily), Prof. Kurzer explained.

A confounding factor in studies on hot flushes is the fact that, in most of these investigations, a decline in complaints by around 20–30% is reported in the placebo group. In intervention studies on the other hand, in which 30 - 104 mg isoflavone was given daily in the form of soy-based food, isolated soy protein and soy extracts, a further reduction by around 20% was observed. In two other studies, however, in which around 80 mg isoflavone was given in the form of isolated soy protein, it was not possible to report any benefit at all except in the placebo group.

Contradictory results of studies are most likely attributable to differences in the initial frequency of hot flushes. Two current reports lead us to suppose that the greatest benefit from soy is achieved in those women who suffered most from hot flushes at the outset, thinks Prof. Kurzer.

A recent review of 13 studies on soy foods and soy supplements enables us to discern that the initial frequency of hot flushes can explain about 46% of the treatment's success. Women who had at least five hot flushes daily at the beginning of the study, showed a frequency reduced by 5% with each further intake. The data suggest that soy isoflavone, together with soy protein, or taken as a virtually pure extract, can reduce hot flushes by 40–50%. This overall reduction includes the decline classed as "placebo effect". The greatest benefits from soy isoflavones are thought to be obtained in test subjects with the most severe complaints who take soy in small quantities, spread over the day.

A further benefit of soy is the improvement in the health of bone mass in post-menopausal women. A study of post-menopausal Japanese women produced a significantly increased bone density in women with the highest intake of soy isoflavones (over 50 mg daily) compared with women with the lowest intake (below 35 mg daily).

Kind concepts in natural and holistic medicine

Dr. Anja Maria Engelsing, Bad Feilnbach

The menopause is part of every woman's life. Like any time of major change, changes are important for further personality development. Ailments can be experienced in very different ways, depending on the individual woman. The whole range of experiences from no complaints at all to severe impairment.

Menopausal complaints are easier to bear if the woman can see some sense in the change and is able to recognise the positive aspects of this time of her life. This depends greatly on her socio-cultural circumstances, how we as a society deal with change and aging, how much value we attach to the process of aging.

As a rule, it is possible to treat any ailments that arise very easily by using natural remedies. Life-style issues are intrinsic to giving thoroughgoing advice (regular outdoor exercise, adequate sleep) and nutrition, and in particular the possibility of incorporating vegetable oestrogens into the diet, e.g. isoflavone from soybeans. There are many plants with medicinal properties that help relieve time-of-life complaints, like black cohosh. Holistic therapies such as homeopathy or other can support the process of the "changing" woman, the transition from being a (potential) mother to being a self-aware, and maybe wise, woman.

Suggested further reading:

Dr. med. Anja Maria Engelsing: Zeit des Wandelns. Wechseljahre ohne Hormontherapie. Erfahrungsheilkunde 2004, 53: 542-549, Haug-Verlag

Thomas Feichtinger, Susana Niedan: Schüßler-Salze für Frauen. Haug-Verlag

Heide Fischer: Frauen Heil-Buch. Verlag Nymphenburger

Dr. med. Gerd Jansen: Lust auf Maca. Die geheimen Scharfmacher. Südwest-Verlag

Dr. med. Bernd Kleine-Gunk: Phyto-Östrogene. Die sanfte Alternative während der Wechseljahre. Trias-Verlag

Dr. med. Bernd Kleine-Gunk, Barbara Imgrund: Ihr Einkaufsführer Phytoöstrogene. Haug-Verlag

Dr. med. Michael Klentze: Die Kraft der Sexualität. Anti-Aging. Südwest-Verlag

Gudula Kosack, Ulrike Krasberg (Hrsg.): Regellose Frauen. Wechseljahre im Kulturvergleich. Ulrike Helmer-Verlag

Peter A. Levine: Trauma-Heilung: Das Erwachen des Tigers. Synthesis-Verlag

Dr. med. Christiane Northrup: Frauenkörper – Frauenweisheit. Verlag Zabert Sandmann

Dr. med. Christiane Northrup: Wechseljahre. Verlag Zabert Sandmann

Julia Onken: Feuerzeichenfrau. Ein Bericht über die Wechseljahre. Becksche Reihe

Dr. med. Claus Schulte-Uebbing: Hildegard-Medizin für Frauen. Haug-Verlag

About the person:

Born 1967, married, one stepdaughter and one daughter

Career:

Human medicine studies at Gießen

Training in Essencia Guidance after Michael Plesse

Practical year at Cádiz, Spain

Training in Essencia Guidance after Michael Plesse

Specialist training in women's medicine and midwifery at Josephinum, Augsburg

Further indicators in homeopathy and natural remedies

Reference source for women's medicine issues

Publications:

Writer on nature and healing, experiential healing

Co-author of the set of books "Integrative medicine – Women's Medicine / Midwifery"; Editor: Prof. Dr. med.

Ingrid Gerhard

Memberships:

Natum Committee, the association of gynaecologists working on natural remedies at the Professional Association of Gynaecologists

Leader of phytotherapy working group at Natum

Member of the working group for Microbiological Therapy, AMT e.V., Herborn

Member of the Scientific Advisory Committee "Gynaecology & Midwifery" (Verlag Urban und Vogel)