



Selección de Resúmenes de Menopausia

Semana del 31 de enero al 6 de febrero de 2018

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Nat Rev Endocrinol. 2018 Feb 2. doi: 10.1038/nrendo.2017.180. [Epub ahead of print]

Symptoms of menopause - global prevalence, physiology and implications.

Monteleone P, Mascagni G, Giannini A, Genazzani AR, Simoncini T.

The symptoms of menopause can be distressing, particularly as they occur at a time when women have important roles in society, within the family and at the workplace. Hormonal changes that begin during the menopausal transition affect many biological systems. Accordingly, the signs and symptoms of menopause include central nervous system-related disorders; metabolic, weight, cardiovascular and musculoskeletal changes; urogenital and skin atrophy; and sexual dysfunction. The physiological basis of these manifestations is emerging as complex and related, but not limited to, oestrogen deprivation. Findings generated mainly from longitudinal population studies have shown that ethnic, geographical and individual factors affect symptom prevalence and severity. Moreover, and of great importance to clinical practice, the latest research has highlighted how certain menopausal symptoms can be associated with the onset of other disorders and might therefore serve as predictors of future health risks in postmenopausal women. The goal of this Review is to describe in a timely manner new research findings on the global prevalence and physiology of menopausal symptoms and their impact on future health.

Lipids Health Dis. 2018 Feb 2;17(1):20. doi: 10.1186/s12944-018-0669-9.

Comparison of lipid profiles and inflammation in pre- and post-menopausal women with cerebral infarction and the role of atorvastatin in such populations.

Zhang J, Wang H, Yang S, Wang X.

BACKGROUND: The risks of atherosclerotic cardiovascular and cerebrovascular diseases in women rapidly increase with age in post-menopausal women. We aimed to investigate the lipid profiles in peri-menopausal women with cerebral infarction and to explore the effects of atorvastatin intervention. **METHODS:** We collected women aged 40-60 with cerebral infarction between January 2013 and December 2016. Atorvastatin was applied for 6 months in all included patients. Blood lipid profiles, serum pro-inflammation cytokines, intracranial plaque and NIH stroke scale (NIHSS) scores were evaluated before and after atorvastatin treatment. **RESULTS:** Totally 210 patients were included. Before atorvastatin treatment, post-menopausal patients had significantly higher levels of triglyceride, cholesterol, low-density lipoprotein and a reduced level of high-density lipoprotein than those in pre-menopausal patients. Blood levels of pro-inflammatory cytokines including interleukin (IL)-1, IL-6 and tumor necrosis factor- α were higher in post-menopausal patients, who had larger intracranial plaques than pre-menopausal patients. Consistently, post-menopausal patients had higher NIHSS scores than pre-menopausal ones. Atorvastatin reduced NIHSS scores and improved dyslipidemia in patients and eliminated the differences of these parameters between pre- and post-menopausal patients. **CONCLUSIONS:** Post-menopausal patients were severer than pre-menopausal patients in terms of dyslipidemia, systemic inflammation and NIHSS scores. Atorvastatin may be beneficial for women with cerebral infarction.

BMC Womens Health. 2018 Feb 2;18(1):32. doi: 10.1186/s12905-018-0525-0.

Normal/high-fat milk consumption is associated with higher lean body and muscle mass in Japanese women aged between 40 and 60 years: a cross-sectional study.

Sukenobe Y, Terauchi M, Hirose A, Hirano M, Akiyoshi M, Kato K, Miyasaka N.

BACKGROUND: Milk is known to contain various nutrients that may have health benefits for postmenopausal women who are at an increased risk of cardiovascular and musculoskeletal diseases. We investigated the association between normal/high- and low-fat milk consumption and body composition in Japanese women aged 40 to 60 years. **METHODS:** This cross-sectional study used the baseline data collected in a previous study that examined the effects of a dietary supplement on a variety of health parameters in 85 Japanese women aged 40 to 60 years. Participants had

been assessed for age, menopausal status, lifestyle factors, and body composition. We estimated the consumption of normal/high- and low-fat milk using a brief-type self-administered diet history questionnaire (BDHQ). Normal/high- and low-fat milk intake were classified as consumer (drank milk at least twice a week) or non-consumer (drank milk at most once a week), in order to identify the parameters that were independently associated with the consumption of normal/high- and low-fat milk. RESULTS: Of the 85 participants who completed the BDHQ, 27 were categorized as non-consumers, 18 as exclusive low-fat milk consumers, and 29 as exclusive normal/high-fat milk consumers. 11 women who consumed both low-fat and normal/high-fat milk were excluded from the analysis. Compared with non-consumers and exclusive low-fat milk consumers, exclusive high-fat milk consumers had significantly higher lean body mass (mean \pm standard deviation [SD], 39.4 ± 2.7 kg vs. 37.9 ± 2.2 kg and 37.6 ± 2.9 kg, $P < 0.05$) and muscle mass (mean \pm SD, 37.2 ± 2.5 kg vs. 35.8 ± 2.0 kg and 35.5 ± 2.7 kg, $P < 0.05$). Both lean body and muscle masses were significantly correlated with vitamin D intake from milk (Pearson $r = 0.29$, $P = 0.008$, and Pearson $r = 0.29$, $P = 0.008$, respectively). CONCLUSION: Normal/high-fat milk consumption was associated with higher lean body and muscle mass in middle-aged Japanese women presumably through high vitamin D intake.

Climacteric. 2018 Feb 2:1-5. doi: 10.1080/13697137.2018.1430131. [Epub ahead of print]

Vasomotor symptoms: natural history, physiology, and links with cardiovascular health.

Thurston RC.

Vasomotor symptoms (VMS), or hot flushes and night sweats, are the classic symptom of menopause. Recent years have brought key advances in the knowledge about VMS. VMS last longer than previously thought, on average 7-10 years for frequent or moderate to severe VMS. Although VMS have long been understood to be important to women's quality of life, research has also linked VMS to indicators of cardiovascular disease (CVD) risk, such as an adverse CVD risk factor profile, greater subclinical CVD and, in emerging work, CVD events. Relations between VMS and CVD are not typically accounted for by CVD risk factors. In newer work, VMS-CVD risk relations are demonstrated with state-of-the-art subjective and objective measures of VMS. Some research indicates that VMS-CVD risk relations may be sensitive to the timing or duration of VMS. Thus, research collectively supports relations between VMS and CVD risk independent of known CVD risk factors. Next steps include identifying the mechanisms linking VMS and CVD risk indicators, understanding any timing effects, and clarifying the precise nature of relations between VMS and CVD risk. Clinical implications are discussed.

Climacteric. 2018 Feb 2:1-5. doi: 10.1080/13697137.2018.1428295. [Epub ahead of print]

Association of body composition with menopausal symptoms in (peri-)menopausal women.

Zhou Y, Zheng Y, Li C, Hu J, Zhou Y, Geng L, Tao M.

OBJECTIVE: To explore the correlation of body composition with the severity of menopausal symptoms, as well as each classic menopausal symptom. METHODS: A total of 758 (peri-)menopausal women were recruited (aged from 40 to 67 years) from the Menopause Clinic in the Shanghai Sixth People's Hospital. Different regions of fat mass, lean mass and fat-free mass were measured by bioelectrical impedance analysis, while menopausal symptoms were evaluated by valid modified Kupperman's index (KMI) in the Chinese version. RESULTS: After adjusting for potential confounders, logistic regression revealed that trunk lean mass (odds ratio 0.29, 95% confidence interval 0.09-0.99) was the independent determinant of moderate to severe menopausal symptoms ($KMI \geq 16$). In multiple regression analysis, significant relationships were found between body mass index and hot flushes/sweating and diabetes ($p < 0.05$). There was a significant relationship between lean mass and muscle/joint pain and sexual problems ($p < 0.05$). We also observed significant relationships between fat mass and hot flushes/sweating and muscle/joint pain. CONCLUSIONS: Our findings indicated that trunk lean mass was an independent protective factor for moderate to severe menopausal symptoms. Strengthening the trunk lean mass may alleviate menopausal symptoms.

Rheumatology (Oxford). 2018 Jan 29. doi: 10.1093/rheumatology/kex526. [Epub ahead of print]

The impact of menopause on functional status in women with rheumatoid arthritis.

Mollard E, Pedro S, Chakravarty E, Clowse M, Schumacher R, Michaud K.

Objective: The aim of this study was to investigate the association of menopause with functional status outcomes in women with RA. **Methods:** Participants were women in a US-wide observational cohort who developed RA before menopause. The HAQ measured functional status. We controlled for confounding variables and used univariate and multivariable generalized estimating equation methods with the sandwich estimator of variance. Best models were selected using the quasi-likelihood under the independence model criterion. A sensitivity analysis was performed using linear mixed effects regression models. **Results:** A total of 8189 women were eligible. Of these, 2005 (24.5%) were pre-menopausal, 611 (7.5%) transitioned through menopause during the study, and 5573 (68.1%) were post-menopausal. Within each respective group, the mean (s.d.) ages were 39.7 (7.8), 50.7 (3.4) and 62.3 (9.3) years. Our results showed that women who were pre-menopausal had less functional decline as measured by the HAQ compared with women who were post-menopausal; these results were robust and strong even after adjustment for other significant factors. The ever-use of hormonal replacement therapy, ever having a pregnancy, and longer length of reproductive life were associated with less functional decline. After menopause, the trajectory of functional decline worsened and accelerated in women with RA. **Conclusion:** The results suggest that menopausal status is associated with functional decline in women with RA. Furthermore, menopause is associated with a worsening progression of functional decline. These data indicate that menopause has a significant impact on the level and rate of functional decline in women with RA.

Climacteric. 2018 Jan 31:1-12. doi: 10.1080/13697137.2017.1421925. [Epub ahead of print]

The impact of micronized progesterone on breast cancer risk: a systematic review.

Stute P, Wildt L, Neulen J.

Postmenopausal women with an intact uterus using estrogen therapy should receive a progestogen for endometrial protection. The debate on bioidentical hormones including micronized progesterone has increased in recent years. Based on a systematic literature review on the impact of menopausal hormone therapy (MHT) containing micronized progesterone on the mammary gland, an international expert panel's recommendations are as follows: (1) estrogens combined with oral (approved) or vaginal (off-label use) micronized progesterone do not increase breast cancer risk for up to 5 years of treatment duration; (2) there is limited evidence that estrogens combined with oral micronized progesterone applied for more than 5 years are associated with an increased breast cancer risk; and (3) counseling on combined MHT should cover breast cancer risk - regardless of the progestogen chosen. Yet, women should also be counseled on other modifiable and non-modifiable breast cancer risk factors in order to balance the impact of combined MHT on the breast.

Menopause. 2018 Jan 29. doi: 10.1097/GME.0000000000001067. [Epub ahead of print]

Effects of oral conjugated equine estrogens with or without medroxyprogesterone acetate on incident hypertension in the Women's Health Initiative hormone therapy trials.

Swica Y, Warren MP, Manson JE, Aragaki AK, Bassuk SS, Shimbo D, Kaunitz A, Rossouw J, Stefanick ML, et al.

OBJECTIVE: The aim of the study was to determine the effect of menopausal hormone therapy on incident hypertension in the two Women's Health Initiative hormone therapy trials and in extended postintervention follow-up.

METHODS: A total of 27,347 postmenopausal women aged 50 to 79 years were enrolled at 40 US centers. This analysis includes the subsample of 18,015 women who did not report hypertension at baseline and were not taking antihypertensive medication. Women with an intact uterus received conjugated equine estrogens (CEE; 0.625 mg/d) plus medroxyprogesterone acetate (MPA; 2.5 mg/d) (n=5,994) or placebo (n=5,679). Women with prior hysterectomy received CEE alone (0.625 mg/d) (n=3,108) or placebo (n=3,234). The intervention lasted a median of 5.6 years in the CEE plus MPA trial and 7.2 years in the CEE-alone trial with 13 years of cumulative follow-up until September 30, 2010. The primary outcome for these analyses was self-report of a new diagnosis of hypertension and/or high blood pressure requiring treatment with medication. **RESULTS:** During the CEE and CEE plus MPA intervention phase, the rate of incident hypertension was 18% higher for intervention than for placebo (CEE: hazard ratio [HR], 1.18; 95% CI, 1.09-1.29; CEE plus MPA: HR, 1.18; 95% CI, 1.09-1.27). This effect dissipated postintervention in both trials (CEE: HR, 1.06; 95% CI, 0.94-1.20; CEE plus MPA: HR, 1.02; 95% CI, 0.94-1.10). **CONCLUSIONS:** CEE (0.625 mg/d) administered orally, with or without CEE plus MPA, is associated with an

increased risk of hypertension in older postmenopausal women. Whether lower doses, different estrogen formulations, or transdermal route of administration offer lower risks warrant further study.

Menopause. 2018 Jan 29. doi: 10.1097/GME.0000000000001065. [Epub ahead of print]

What's in a name: are menopausal "hot flashes" a symptom of menopause or a manifestation of neurovascular dysregulation?

Miller VM, Kling JM, Files JA, Joyner MJ, Kapoor E, Moyer AM, Rocca WA, Faubion SS.

Hot flashes have typically been classified as "symptoms of menopause" that should be tolerated or treated until they resolve. However, mounting evidence points to hot flashes as a manifestation of one or several underlying pathophysiological processes. Associations exist between the presence, timing of onset, severity, and duration of hot flashes, and the risk of several neurological (affecting sleep, mood, and cognition) and cardiovascular conditions. In addition, four consistent patterns of vasomotor disturbances have been identified across different countries, making it unlikely that these patterns are solely explained by socioeconomic or cultural factors. The changing hormonal environment of menopause may unmask differences in the autonomic neurovascular control mechanisms that put an individual woman at risk for chronic conditions of aging. These differences may have a genetic basis or may be acquired across the life span and are consistent with the variability of the clinical manifestations of aging observed in women after bilateral oophorectomy. It is time to investigate the pathophysiological mechanisms underlying the four patterns of vasomotor symptoms more closely, and to shift from describing hot flashes as symptoms to be tolerated to manifestations of an underlying autonomic neurovascular dysregulation that need to be addressed.

Calcif Tissue Int. 2018 Jan 29. doi: 10.1007/s00223-018-0394-4. [Epub ahead of print]

Bone Mineral Density Changes After 1 Year of Denosumab Discontinuation in Postmenopausal Women with Long-Term Denosumab Treatment for Osteoporosis.

Popp AW, Varathan N, Buffat H, Senn C, Perrelet R, Lippuner K.

The aim of the present study was to document the changes in bone mineral density (BMD) 1 year after denosumab loss-of-effect following long-term treatment with subcutaneous denosumab 60 mg Q6M during 7 or 10 years and in the absence of any treatment with a bone active substance. All postmenopausal women with osteoporosis who participated to the randomized placebo-controlled FREEDOM core trial and its open-label extension at the University Hospital of Bern, Switzerland, and who accepted to undergo off-treatment follow-up during 1 year after discontinuation, were included (N = 12). After 10 years of denosumab, mean lumbar spine (LS) BMD had increased by 21.2% vs. baseline. One year after discontinuation LS BMD had decreased by -9.1% vs. Year 10, resulting in a net gain of 10.2% vs. baseline. At total hip (TH) and femoral neck (FN), BMD had increased by 8.3 and 8.1% in Year 10 vs. baseline, respectively. 1 Year after discontinuation, BMD had decreased by -12.7 and -11.0% vs. Year 10, respectively, corresponding to net BMD losses of -5.5 and -3.8% vs. baseline, respectively. Similar albeit less pronounced changes were observed in those treated with denosumab during 7 years. Stopping denosumab after long-term exposure resulted in BMD losses of large order of magnitude at all measured sites, suggesting that treatment duration may predict the rate and amount of bone lost.

Front Aging Neurosci. 2018 Jan 9;9:439. doi: 10.3389/fnagi.2017.00439. eCollection 2017.

Sex Hormones and Healthy Psychological Aging in Women.

Navarro-Pardo E, Holland CA, Cano A.

Besides their key role in reproduction, estrogens have effects in several organs in the body, as confirmed by the identification of estrogen receptors (ER) in multiple tissues. Experimental evidence has shown that estrogens have significant impacts on the central nervous system (CNS), and a key question is to what extent the fall in estrogen levels in the blood that occurs with increasing age, particularly around and following the menopause, has an impact on the cognitive function and psychological health of women, specifically regarding mood. This review will consider direct effects of menopausal changes in estrogens on the brain, including cognitive function and mood. Secondary pathways whereby health factors affected by changes in estrogens may interact with CNS functions, such as cardiovascular factors, will be reviewed as well insofar as they also have an impact on cognitive function. Finally, because decline in estrogens may induce changes in the CNS, there is interest in clarifying whether hormone therapy may offer a beneficial balance and the impact of hormone therapy on cognition will also be considered.