



## Selección de Resúmenes de Menopausia

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### Are serum estrogen concentrations associated with menopausal symptom bother among postmenopausal women? Baseline results from two MsFLASH clinical trials

Carolyn J Crandall 1, Joseph C Larson 2, Kristine E Ensrud 3, Andrea Z LaCroix 4, Katherine A Guthrie 5, et al.

Objectives: To evaluate whether single measurements of serum estradiol (E2), estrone (E1) and sex hormone-binding globulin (SHBG) concentration distinguishes between women with and without menopausal symptom bother. Study design: We analyzed baseline data from two clinical trials conducted in 2012-2017: MsFLASH 03 (178 peri-/postmenopausal women aged 40-62 years with bothersome vasomotor symptoms, mean age 54) and MsFLASH 05 (181 postmenopausal women aged 45-70 years with moderate-to-severe vulvovaginal symptoms, mean age 61). Main outcome measures: Symptom bother (hot flushes or flashes, night sweats, sweating, aching in muscles and joints, change in sexual desire, vaginal dryness during intercourse, and avoiding intimacy) in the past month was assessed using the Menopause-Specific Quality of Life questionnaire. Using logistic regression, we calculated the area under the receiver operating characteristic curve (AUC) values for E1, E2, and SHBG concentration in relation to being at least somewhat bothered (symptom bother score  $\geq 3$ ) by each symptom within each trial study population. Results: AUC values (95% confidence interval) ranged between 0.51 (0.41-0.60) and 0.62 (0.53, 0.72) for MsFLASH 03 and between 0.51 (0.42, 0.59) and 0.64 (0.53, 0.75) for MsFLASH 05. There was little evidence of associations between serum hormone levels and bother by a given menopausal symptom. Conclusion: These findings do not support the clinical utility of a single measurement of serum of E1, E2, or SHBG concentrations in differentiating between women who are bothered by a given menopausal symptom and those who are not.

**Maturitas. 2022 Mar 21;162:1-7. doi: 10.1016/j.maturitas.2022.03.002. Online ahead of print.**

### Is early menopause a potential criterion for cardiovascular risk screening to detect high risk in a multi-ethnic population? The Helius study

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Background: Women at risk of cardiovascular disease (CVD) may be missed with current eligibility criteria for CVD risk screening, particularly those from ethnic minority groups, among whom high risk is prevalent at a younger age. Early menopause (EM; menopause before 45 years) is associated with increased risk of CVD, and may be a potential eligibility criterion for CVD risk screening. Aims and objectives: To determine the contribution of EM to current criteria from patient history (having a family history of CVD, current smoking, obesity and age over 50 years) for identifying women eligible for CVD risk screening in a multi-ethnic population. Methods and results: We used baseline data (2011-2015) from 4512 women aged 45-70 years of Dutch, South-Asian Surinamese, African Surinamese, Ghanaian, Turkish and Moroccan ethnic origin from the HELIUS study (Amsterdam, Netherlands). Models based on current eligibility criteria with and without EM were compared on area under the curve (AUC) with regard to estimated 10-year CVD risk using the Dutch SCORE. Overall, models with EM had a higher AUC, but changes were not statistically significant. In our total sample of women aged between 45 and 70 years, the AUC changed from 0.70 (95%CI 0.69-0.72) to 0.71 (95%CI 0.69-0.72). Among women aged 45-50 years the AUC changed from 0.66 (95%CI 0.58-0.74) to 0.68 (95%CI 0.59-0.74). Results were consistent across ethnic groups. Conclusions: The addition of EM to current eligibility criteria did not improve the detection of women at high CVD risk in a multi-ethnic sample of women aged 45-70 years.

**Obstet Gynecol Sci. 2022 Apr 29. doi: 10.5468/ogs.22053. Online ahead of print.**

### Value of endometrial thickness and Doppler parameters of uterine artery in predicting endometrial cancer in postmenopausal women with abnormal uterine bleeding: a cross-sectional study in Vietnam

Phuc Nhon Nguyen 1, Van Tuan Nguyen 2

**Objective:** To determine the value of endometrial thickness and Doppler indices of the uterine artery as markers for predicting endometrial cancer in postmenopausal women with abnormal uterine bleeding. **Methods:** This cross-sectional study was conducted at the Hue University Hospital and Hue Central Hospital between June 2016 and June 2019. The study enrolled all women who complained of postmenopausal bleeding and were followed by Doppler transvaginal ultrasound. Their definitive histopathological examination was the gold standard for comparison. **Results:** The Doppler parameters of the uterine artery, such as resistance index (RI), pulsatility index (PI), and peak systolic velocity (PSV), were significantly lower in the malignant group than in the benign group. The threshold values of the uterine artery,  $RI \leq 0.73$  and  $PI \leq 1.42$ , were found with an area under ROC curve (AUC) of 0.85-0.88, and the sensitivity and specificity were 91.3% and 83.3%, respectively. Unlike PSV, the diagnostic value was the lowest, with an AUC of 0.72. Endometrial thickness (ET) was a good predictor for the diagnosis of endometrial cancer, with an AUC of 0.89. In women with postmenopausal bleeding, when using the cut-off value of an endometrial thickness more than 12.5 mm, the sensitivity and specificity were 93.8% and 77.8%, respectively. In addition, the higher the stage of endometrial cancer, the lower the RI and PI and the greater the endometrial thickness. **Conclusion:** ET, and RI, PI, and PSV of the uterine artery could help in differentiating malignant from benign endometrial changes. Pulsed ultrasonic Doppler velocimetry seems to predict the higher stages of endometrial carcinoma. Further studies are needed to confirm these findings.

**Menopause. 2022 May 1;29(5):580-589. doi: 10.1097/GME.0000000000001944.**

### **The effect of micronized progesterone and medroxyprogesterone acetate in combination with transdermal estradiol on hemostatic biomarkers in postmenopausal women diagnosed with POI and early menopause: a randomized trial**

Monica Mittal 1, Paradzai Chitongo, Prasanna Raj Supramaniam, Linda Cardozo, Mike Savvas, Nick Panay, et al.  
**Objective:** To compare the impact of micronized progesterone (MP) or medroxyprogesterone acetate (MPA) in combination with transdermal estradiol (t-E2) on traditional coagulation factors and thrombin generation parameters in postmenopausal women diagnosed with premature ovarian insufficiency or early menopause. **Method:** Randomized prospective trial conducted in women diagnosed with premature ovarian insufficiency or early menopause and an intact uterus, recruited over 28 months. All participants were prescribed t-E2 and randomized to either cyclical MP or MPA using a web-based computer randomization software, Graph Pad. Thrombin generation parameters were measured at baseline and repeated after 3-months. Traditional hemostatic biomarkers were measured at baseline and repeated after 3, 6, and 12-months. Seventy-one participants were screened for the study, of whom 66 met the inclusion criteria. In total, 57 participants were randomized: 44 completed the thrombin generation assessment arm of the study, whilst 32 completed 12-months of the traditional coagulation factor screening component of the trial. **Results:** Thrombin generation parameters did not significantly change from baseline after 3-months duration for either progestogen component when combined with t-E2, unlike the traditional coagulation factors. Protein C activity, free Protein S, and Antithrombin III levels decreased with time in both treatment arms. **Conclusion:** Fluctuations in traditional hemostatic biomarkers were not reproduced by parallel changes in thrombin generation parameters that remained neutral in both groups compared with baseline. The absence of statistically significant changes in thrombin generation for the first 3-months of hormone therapy use is reassuring and would suggest a neutral effect of both progestogens on the global coagulation assay.

**Cureus. 2022 Mar 23;14(3):e23432. doi: 10.7759/cureus.23432. eCollection 2022 Mar.**

### **Abnormal Uterine Bleed in a Postmenopausal Woman With the Use of Escitalopram**

Akshita Yadav 1, Brandon S Bharat 1, Stephanie Montrose 2  
 Selective serotonin reuptake inhibitors (SSRIs) are among the most widely used antidepressants worldwide. They are an effective first-line treatment for depression. Common side effects can be quickly remediated by switching to a different drug, making it easy to miss rare side effects and even causing them to go underreported. This case study examines an instance of uterine bleeding in a postmenopausal woman after starting an antidepressant. A detailed history determined that the medication was the only noticeable change in her daily routine before the onset of bleeding, making it the likely cause. Due to the high index of suspicion, the medication was discontinued, and it was apparent that the

bleeding ceased. This phenomenon demonstrated the role of serotonin in potentiating the coagulation cascade. Research on this topic is limited, but there have been other reported cases of similar findings in the past.

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### **Effect of menopausal hormone therapy on arterial wall echomorphology: Results from the Early versus Late Intervention Trial with Estradiol (ELITE)**

Roksana Karim 1, Wenrui Xu 2, Naoko Kono 3, Intira Sriprasert 4, Yanjie Li 5, Mingzhu Yan 6, et al.

**Objective:** To evaluate the effect of hormone therapy (HT) on arterial wall composition by ultrasound. **Background:** The effect of HT on the progression of subclinical atherosclerosis has been well-described using measurements of common carotid artery (CCA) wall thickness. However, it is unknown whether the change in arterial wall anatomic structure is accompanied by an effect of HT on arterial wall composition. **Methods:** A total of 643 healthy postmenopausal women divided into two strata according to the time since menopause (<6 years, the early-postmenopause group; or >10 years, the late-postmenopause group) were randomized to receive either active treatment or placebo. For hysterectomized women, the active treatment was oral micronized 17 $\beta$ -estradiol 1 mg/day; for women with a uterus, 4% vaginal micronized progesterone gel 45 mg/day for 10 days each month was added to the estradiol regimen. Gray-scale median of the CCA intima-media complex (IM-GSM), a (unitless) measurement of arterial wall composition based on echogenicity, was determined by high-resolution B-mode ultrasonography. Lower IM-GSM, or less echogenicity, indicates more atherosclerosis. IM-GSM and serum estradiol (E2) concentration were assessed every 6 months over a median 4.8-year trial period. Linear mixed effects regression models were used for all analyses. **Results:** Overall, IM-GSM progression/year had a negative trajectory, reflecting reduction in echogenicity over time (worsening atherosclerosis). HT effects on IM-GSM progression/year differed by postmenopause strata (interaction p-value = 0.02). IM-GSM progression/year (95% CI) in the early postmenopause group randomized to HT was -0.50 (-0.82, -0.18)/year compared with -1.47 (-1.81, -1.13)/year among those randomized to placebo (p-value <0.0001). In the late postmenopause group, the annual IM-GSM progression rate did not significantly differ between HT and placebo (p = 0.28). Higher mean on-trial E2 (pg/ml) levels were associated with higher IM-GSM progression, indicating less atherosclerosis progression in all women ( $\beta$  (95% CI) = 0.006 (0.0003, 0.01), p = 0.04). For each pg/dl E2, IM-GSM progression/year was 0.007 ((-0.0002, 0.01), p = 0.056) in the early and 0.003 ((-0.006, 0.01), p = 0.50) in the late postmenopause group (interaction p-value = 0.51). CIMT progression rate ( $\mu$ m/year) was significantly inversely associated with the IM-GSM progression ( $\beta$  (95% CI) = -4.63 (-5.6, -3.7), p <0.001). **Conclusions:** HT, primarily with oral estradiol, reduced atherogenic progression of arterial wall composition in healthy postmenopausal women who were within 6 years from menopause.

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### **Dietary fiber in the prevention of obesity and obesity-related chronic diseases: From epidemiological evidence to potential molecular mechanisms**

Isabella Skye Waddell 1, Caroline Orfila 1

Obesity is a mostly preventable diet-related disease and currently a major challenge for human populations worldwide. Obesity is a major risk factor for diseases such as type 2 diabetes mellitus (T2DM), cardiovascular disease (CVD) and certain cancers. Dietary fiber is a complex mixture of non-digestible molecules, mostly polysaccharides. Multiple epidemiological studies have demonstrated statistically significant reductions in risks of obesity, T2DM, CVD, colorectal cancer, and pre-menopausal breast cancer with higher dietary fiber intakes. Various direct and indirect mechanisms have been proposed including altered digestion and absorption, stimulation of gut hormones including glucagon-like-peptide-1 (GLP-1) and peptide YY (PYY), reduced appetite, and altered metabolism of bile and cholesterol. These may act via pathways involving G-protein-coupled receptors (GPRs), histone deacetylase (HDAC), and aromatase enzymes. Ultimately, fiber intake contributes to improving glucose levels and insulin sensitivity, lowering risk of T2DM, CVD and certain cancers. Therefore, diets rich in dietary fiber should be encouraged to prevent obesity and associated chronic disease.