



## Women's Health Care Bibliography September 2004

1: Aliment Pharmacol Ther. 2004 Sep 1;20(5):551-7.

**Fracture risk of women with primary biliary cirrhosis: no increase compared with general population controls.**

Boulton-Jones JR, Fenn RM, West J, Logan RF, Ryder SD.

Summary Aim : Patients with primary biliary cirrhosis may be at increased risk of osteoporosis but to what extent this is reflected in an increased fracture risk is unknown. We have enquired about the fracture experience of female primary biliary cirrhosis patients compared with sex- and age-matched controls. Methods : Patients aged 30-75 with primary biliary cirrhosis and age-matched controls were sent a postal questionnaire asking about their fracture history and details of risk factors for osteoporosis. Results : 85 eligible patients with primary biliary cirrhosis and 116 controls responded. Forty-one per cent of patients with primary biliary cirrhosis and 30% of controls reported ever having had a fracture odds ratio 1.5 (95% confidence interval: 0.80-2.89). Twenty-eight per cent of primary biliary cirrhosis patients and 23.3% of controls reported a fracture after the age of 30, odds ratio 1.2 (95% confidence interval: 0.57-2.56), and 14.1% of primary biliary cirrhosis patients and 12.1% of controls reported a low impact fracture of the long bones or of the vertebrae odds ratio 1.0 (95% confidence interval: 0.31-2.68). Conclusions : No overall increased fracture risk in patients with primary biliary cirrhosis was observed. As a group, unselected patients with primary biliary cirrhosis do not represent a population at particularly high risk of osteoporotic fracture and thus targeting them for osteoporosis screening and treatment is not justified. Further work investigating subgroups of patients with primary biliary cirrhosis at potentially high risk of osteoporosis, such as those with advanced disease or severe cholestasis is required. PMID: 15339326 [PubMed - in process]

2: Am J Cardiol. 2004 Sep 1;94(5):655-9.

**Prevalence and determinants of breast arterial calcium in women at high risk of cardiovascular disease.**

Maas AH, van der Schouw YT, Mali WP, van der Graaf Y.

Calcium deposits in breast arteries are commonly seen on mammograms, and their frequency increases with age, especially after menopause. The investigators studied the prevalence of breast arterial calcium in 600 women at high risk for cardiovascular events and assessed whether classic cardiovascular risk factors are independent determinants of these calcifications. Copyright 2004 Excerpta Medica, Inc. PMID: 15342303 [PubMed - in process]

3: Am J Clin Nutr. 2004 Sep;80(3):626-32.

**Fish intake is associated with a reduced progression of coronary artery atherosclerosis in postmenopausal women with coronary artery disease.**

Erkkila AT, Lichtenstein AH, Mozaffarian D, Herrington DM.

BACKGROUND: Higher intakes of fish and n-3 fatty acids are associated with a reduced risk of cardiovascular events and mortality. However, limited data exist on the effect of fish intake on actual measures of progression of coronary artery atherosclerosis. OBJECTIVE: The aim was to examine the association between fish intake and the progression of coronary artery atherosclerosis in women with coronary artery disease. DESIGN: This was a prospective cohort study of postmenopausal women (n = 229) participating in the Estrogen Replacement and Atherosclerosis trial. Usual fish intake was estimated at baseline with a food-frequency questionnaire. Quantitative coronary angiography was performed at baseline and after 3.2 +/- 0.6 (x +/- SD) y to evaluate changes in the mean minimum coronary artery diameter, the mean percentage of stenosis, and the development of new coronary lesions. RESULTS: Compared with lower fish intakes, consumption of > or =2 servings of fish or > or =1 serving of tuna or dark fish per week was associated with smaller increases in the percentage of stenosis (4.54 +/- 1.37% compared with -0.06 +/- 1.59% and 5.12 +/- 1.48% compared with 0.35 +/- 1.47%, respectively; P < 0.05 for both) in diabetic women after adjustments for age, cardiovascular disease risk factors, and dietary intakes of fatty acids, cholesterol, fiber, and alcohol. These associations were not significant in nondiabetic women. Higher fish consumption was also associated with smaller decreases in minimum coronary artery diameter and fewer new lesions. CONCLUSIONS: Consumption of fish is associated with a significantly reduced progression of coronary artery atherosclerosis in women with coronary artery disease. PMID: 15321802 [PubMed - in process]

4: Am J Epidemiol. 2004 Sep 15;160(6):540-8.

**Glucose and insulin components of the metabolic syndrome are associated with hyperandrogenism in postmenopausal women: the atherosclerosis risk in communities study.**

Golden SH, Ding J, Szklo M, Schmidt MI, Duncan BB, Dobs A.

In 1990-1992, the authors investigated the association of total and free testosterone with the metabolic syndrome in postmenopausal US women not taking hormone replacement therapy (n = 362) in a prevalent case-control study of carotid atherosclerosis. Free testosterone was estimated by using the free androgen index (FAI) (total testosterone/sex hormone-binding globulin ratio). The metabolic syndrome was defined as the presence of three or more of the following criteria: waist circumference >/=35 inches (88.9 cm), triglycerides >/=150 mg/dl, high density lipoprotein cholesterol <40 mg/dl, blood pressure >130/80 mmHg, fasting insulin >/=100 pmol/liter, or impaired glucose homeostasis (fasting glucose >/=110 mg/dl or diagnosed diabetes mellitus). FAI, but not total testosterone, was strongly associated with the metabolic syndrome. Compared with women in the lowest FAI quartile, those in the highest quartile had a fivefold greater odds of having the metabolic syndrome (odds ratio = 5.38, 95% confidence interval: 2.70, 10.7) after adjustment for age, race, and carotid atherosclerosis status. In multivariate analyses, the three-component metabolic syndrome combinations that contained both hyperinsulinemia and hyperglycemia were most strongly associated with increased FAI (absolute increase = 0.41-0.54 compared with that for women who did not have these combinations; all p's < 0.001). Higher FAI was associated with the hyperinsulinemia and hyperglycemia components of the metabolic syndrome. The role of androgens in glucose homeostasis in postmenopausal women requires further study. PMID: 15353414 [PubMed - in process]

5: Am J Epidemiol. 2004 Sep 1;160(5):475-83.

**Factors associated with treatment initiation after osteoporosis screening.**

Brennan RM, Wactawski-Wende J, Crespo CJ, Dmochowski J.

The prevalence of osteoporosis and factors associated with treatment initiation after detection of osteoporosis were determined for previously unscreened, postmenopausal women. Dual-energy x-ray absorptiometry screening was conducted in 1997-2000 as part of an ancillary study of the Buffalo, New York, center of the Women's Health Initiative Observational Study. A total of 945 women were previously unaware of their bone density, although, for 344 (36.4%), osteoporosis was newly detected through screening (T-score  $\leq$  -2.5). Of those women, 250 (72.7%) discussed the results with a health care provider, and 140 (56.0%) initiated treatment after doing so. In multivariate logistic regression analyses, factors associated with treatment initiation were T-score (odds ratio (OR) = 0.39 per unit increase, 95% confidence interval (CI): 0.23, 0.67), routine medical care more often than yearly (OR = 2.08, 95% CI: 1.12, 3.86), college education (OR = 2.58, 95% CI: 1.25, 5.31), family income of  $\geq$  \$50,000 (OR = 2.06, 95% CI: 1.03, 4.14), and discussing screening results with a gynecologist (OR = 3.20, 95% CI: 1.33, 7.67). These findings suggest that many postmenopausal women are unaware of their bone density and could benefit from screening. In this study, approximately half of the women with osteoporosis initiated treatment after screening. Disease severity, medical care frequency, education, income, and physician type predicted treatment initiation.

PMID: 15321845 [PubMed - in process]

6: Arch Gerontol Geriatr. 2004 Sep-Oct;39(2):157-61.

**Relationship between low back pain in post-menopausal women and mineral content of lumbar vertebrae.**

Folman Y, Shabat S, Gepstein R.

Until recently, chronic low back pain in post-menopausal women was commonly attributed to osteoporosis. This opinion has since been challenged on many counts, but controversy persists. The objective of this study was to examine this relationship. In 67 post-menopausal women, the mineral content of the lumbar vertebrae was measured by dual-energy X-ray absorptiometry and the age-normalized bone mineral index (ANBMI), the Z-score, was determined. Mean ANBMI in 40 subjects who complained of chronic low back pain (Group 1) was compared with mean ANBMI in the 27 who did not (Group 2). Pain intensity and related disability were quantified using standard questionnaires. Their respective correlations with ANBMI index and age at onset of menopause were examined. Correlation coefficients and significance of group differences were examined by appropriate statistical methods. The results showed that the mean ANBMI in Group 1 subjects was 96.5  $\pm$  16.9%, in Group 2 subjects it was 88.6  $\pm$  10.0%. Neither pain intensity nor disability was correlated with ANBMI. A weak but significant positive correlation was noted between body mass index and intensity of low back pain ( $r = 0.37$ ;  $P < 0.05$ ). The occurrence and severity of chronic low back pain in post-menopausal women, and the disability thereof, appear to be unrelated to the mineral content of lumbar vertebrae.

PMID: 15249152 [PubMed - in process]

7: Best Pract Res Clin Endocrinol Metab. 2004 Sep;18(3):317-32.

**Hormone replacement therapy: controversies, pros and cons.**

Warren MP, Halpert S.

Hormone replacement therapy (HRT) is a complicated clinical issue that requires an in-depth risk/benefit assessment. The term HRT includes both oestrogen plus progestin therapy (OPT) and oestrogen-only therapy (OT). Much research has been done with the former, but additional research is still needed for the latter. This chapter aims to provide a comprehensive overview of the key risks and benefits in order to assist clinicians and patients confronting this issue. In approaching the vast amount of data on HRT a caveat is in order: many of the issues involved are not black and white. The clinical data are often conflicting and careful analysis is required. Despite the discrepancies between the various HRT studies, there is much to be gleaned from a close examination of the data. The primary risks associated with HRT use are related to breast cancer and cardiovascular health. Recent clinical trial data have pointed to a slight increase in the number of breast cancers among women using HRT compared to placebo. With regard to cardiovascular health, the data have shown an increase in stroke and (VTE) but there is also evidence of a possible cardioprotective effect. The major benefits include relief of menopausal symptoms (including vasomotor instability, sexual dysfunction, mood, fatigue and skin issues) and a decrease in fracture risk. Copyright 2004 Elsevier Ltd. PMID: 15261840 [PubMed - in process]

8: BJOG. 2004 Sep;111(9):950-9.

**A double-blind randomised controlled trial of laparoscopic uterine nerve ablation for women with chronic pelvic pain.**

Johnson NP, Farquhar CM, Crossley S, Yu Y, Peperstraten AM, Sprecher M, Suckling J.

**Objective** To determine the effectiveness of laparoscopic uterine nerve ablation (LUNA) for chronic pelvic pain in women with endometriosis and women with no laparoscopic evidence of endometriosis. **Design** A prospective double-blind randomised controlled trial (RCT). **Setting** Single-centre, secondary-level gynaecology outpatient service and tertiary-level pelvic pain and endometriosis outpatient service in Auckland, New Zealand. **Population** One hundred and twenty-three women undergoing laparoscopy for investigation and management of chronic pelvic pain, 56 with no laparoscopic evidence of endometriosis and 67 with endometriosis. **Methods** Women were randomised from the two populations, firstly those with no evidence of endometriosis and secondly those undergoing laparoscopic surgical treatment for endometriosis, to receive LUNA or no LUNA. Participant and assessor blinding was employed. Follow up for pain outcomes was undertaken at 24 hours, 3 months and 12 months. **Main outcome measures** Changes in non-menstrual pelvic pain, dysmenorrhoea, deep dyspareunia and dyschezia were assessed primarily by whether there was a decrease in visual analogue score for these types of pain of 50% or more from baseline and additionally whether there was a significantly different change in median visual analogue score. The numbers requiring further surgery or starting a new medical treatment for pelvic pain and complications were also measured. **Results** There was a significant reduction in dysmenorrhoea at 12 month follow up in women with chronic pelvic pain in the absence of endometriosis who underwent LUNA (median change in visual analogue scale (VAS) from baseline -4.8 versus -0.8 (P= 0.039), 42.1% versus 14.3% experiencing a successful treatment defined as a 50% or greater reduction in visual analogue pain scale for dysmenorrhoea (P= 0.045). There was no significant difference in non-menstrual pelvic pain, deep dyspareunia or dyschezia in women with no endometriosis undergoing LUNA versus no LUNA. The addition of LUNA to laparoscopic surgical treatment of endometriosis was not associated with a significant difference in any pain outcomes. **Conclusions** LUNA is effective for dysmenorrhoea in the absence of endometriosis, although there is no evidence of effectiveness of LUNA for non-dysmenorrhoeic chronic pelvic pain or for any type of chronic pelvic pain related to endometriosis.

PMID: 15327610 [PubMed - in process]

9: Circulation. 2004 Sep 14;110(11):1424-30. Epub 2004 Sep 07.

**Predictors of heart failure among women with coronary disease.**

Bibbins-Domingo K, Lin F, Vittinghoff E, Barrett-Connor E, Hulley SB, Grady D, Shlipak MG.

**BACKGROUND:** Although heart failure is common among women with coronary disease, the risk factors for developing heart failure have not been well studied. We determined the risk factors for developing heart failure among postmenopausal women with established coronary disease. **METHODS AND RESULTS:** This is a prospective cohort study using data from the Heart and Estrogen/progestin Replacement Study (HERS), a randomized, blinded, placebo-controlled trial of 4.1 years' duration, and subsequent open-label observational follow-up for 2.7 years (HERS II), performed at 20 US clinical centers between 1993 and 2000. Of the 2763 postmenopausal women with established coronary disease in the HERS trial, we studied the 2391 women with no heart failure at baseline by self-report and physical examination. The primary outcome of this analysis was incident heart failure defined by hospital admission or death from heart failure. During the 6.3+/-1.4-year follow-up, 237 women (10%) developed heart failure. Nine predictors were identified: diabetes (defined as a self-reported history of diabetes on treatment), atrial fibrillation, myocardial infarction, creatinine clearance <40 mL/min, systolic blood pressure >120 mm Hg, current smoking, body mass index >35 kg/m<sup>2</sup>, left bundle-branch block, and left ventricular hypertrophy. Randomization to estrogen/progestin was not associated with heart failure (hazard ratio=1.0; 95% CI, 0.7 to 1.3). Diabetes was the strongest risk factor (adjusted hazard ratio=3.1; 95% CI, 2.3 to 4.2). Diabetic women with elevated body mass index or depressed creatinine clearance were at highest risk, with annual incidence rates of 7% and 13%, respectively. Among diabetic women, hyperglycemia was associated with heart failure risk (adjusted hazard ratio=3.0; 95% CI, 1.2 to 7.5 for fasting glucose >300 mg/dL compared with fasting glucose 80 to 150 mg/dL). **CONCLUSIONS:** We identified 9 predictors of heart failure in postmenopausal women with coronary disease. Diabetes was the strongest risk factor, particularly when poorly controlled or with concomitant renal insufficiency or obesity.

PMID: 15353499 [PubMed - in process]

10: Clin Infect Dis. 2004 Sep 1;39(5):717-24. Epub 2004 Aug 16.

**Prevalence of clinical symptoms associated with highly active antiretroviral therapy in the Women's Interagency HIV Study.**

Silverberg MJ, Gore ME, French AL, Gandhi M, Glesby MJ, Kovacs A, Wilson TE, Young MA, Gange SJ.

**BACKGROUND:** The extended use of antiretroviral drugs among human immunodeficiency virus (HIV)-seropositive individuals underscores the need for a comprehensive evaluation of therapy-associated clinical symptoms. **METHODS:** Beginning in April 2000, 364 HIV-seronegative and 1256 HIV-seropositive women enrolled in a multicenter cohort study reported clinical symptoms that included abdominal pain, diarrhea, anorexia, nausea and/or vomiting, myalgias, fatigue, fever, body fat redistribution, dizziness, headaches, paresthesias, xerostomia, nephrolithiasis, and rash. We examined the prevalence of symptoms with respect to HIV infection and the use of highly active antiretroviral therapy (HAART), using data-correlation models. **RESULTS:** In the 6 months before a study visit, 49% of HIV-seronegative women, 67% of HIV-seropositive women not receiving therapy, and 69% of HIV-seropositive women receiving HAART reported any clinical symptom. The odds ratios (ORs) for reporting any symptom were 1.4 (95% confidence interval [CI], 1.1-1.8) for women who changed HAART regimens and 0.9 (95% CI, 0.7-1.1)

for women reporting stable HAART use, compared with those reporting no therapy use. Significant findings ( $P < .05$ ) for particular symptoms were an increased odds of diarrhea, nausea and/or vomiting, body fat redistribution, myalgias, and paresthesias, when data for women who changed HAART regimens were compared with those for women not receiving therapy. The OR for reporting any symptom was 1.5 (95% CI, 1.2-1.9) for women who switched HAART regimens and 1.6 (95% CI, 1.3-1.9) for women who discontinued HAART, compared with those reporting stable HAART use. CONCLUSIONS: Our findings confirm the high prevalence of clinical symptoms among HIV-seropositive women who changed HAART regimens. The high prevalence of symptoms among HIV-seronegative women and HIV-seropositive women not receiving therapy demonstrates that caution should be used when attributing the occurrence of symptoms entirely to HAART. PMID: 15356788 [PubMed - in process]

11: Diabetes Care. 2004 Sep;27(9):2116-9.

**Hepatitis C infection and type 2 diabetes in american-Indian women.**

Wilson C.

OBJECTIVE-The aim of this study was to describe the association between hepatitis C virus (HCV) infection and type 2 diabetes among a group of American-Indian women who were screened for both conditions. RESEARCH DESIGN AND METHODS-The study population was a convenience sample of women who were receiving prenatal care. All women were systematically screened for both HCV and diabetes. RESULTS-A total of 426 women were included in the sample. HCV infection was detected in 13 (3.1% [95% CI 1.7-5.0]) and type 2 diabetes in 22 (5.2%, [3.3-7.6]) women. Women diagnosed with type 2 diabetes were more obese and had higher serum alanine aminotransferase activity compared with women without diabetes. Four of 13 (30.8% [10.6-58.7]) HCV-infected women and 18 of 413 (4.4% [2.7-6.7]) women without evidence of HCV infection had type 2 diabetes. (odds ratio 9.8 [95% CI 2.4-34.0], Fisher's exact test  $P = 0.003$ ). In a logistic regression model, increasing age (10-year increments), obesity (by standard deviations from the mean BMI), and positive HCV status were each independently related to the diagnosis of diabetes. CONCLUSIONS-Among American-Indian women, type 2 diabetes is more common in those with than in those without HCV infection. This association and its potential mechanisms may have clinical implications. Investigation into the mechanisms linking HCV infection to the expression of type 2 diabetes may also help to define processes that promote the development of type 2 diabetes in susceptible individuals.

PMID: 15333471 [PubMed - in process]

12: Diabetes Care. 2004 Sep;27(9):2108-15.

**A Prospective Study of Red Meat Consumption and Type 2 Diabetes in Middle-Aged and Elderly Women: The Women's Health Study.**

Song Y, Manson JE, Buring JE, Liu S.

OBJECTIVE-The aim of this study was to prospectively assess the relation between red meat intake and incidence of type 2 diabetes. RESEARCH DESIGN AND METHODS-Over an average of 8.8 years, we evaluated 37,309 participants in the Women's Health Study aged  $\geq 45$  years who were free of cardiovascular disease, cancer, and type 2 diabetes and completed validated semiquantitative food frequency questionnaires in 1993. RESULTS-During 326,876 person-years of follow-up, we documented 1,558 incident cases of type 2 diabetes. After adjusting for age, BMI, total energy intake, exercise, alcohol intake, cigarette smoking, and family history of diabetes, we found positive associations between intakes of red meat and processed meat and risk of type 2 diabetes. Comparing women in the highest quintile with those in the lowest quintile, the multivariate-adjusted relative risks

(RRs) of type 2 diabetes were 1.28 for red meat (95% CI 1.07-1.53,  $P < 0.001$  for trend) and 1.23 for processed meat intake (1.05-1.45,  $P = 0.001$  for trend). Furthermore, the significantly increased diabetes risk appeared to be most pronounced for frequent consumption of total processed meat (RR 1.43, 95% CI 1.17-1.75 for  $\geq 5$ /week vs.  $< 1$ /month,  $P < 0.001$  for trend) and two major subtypes, which were bacon (1.21, 1.06-1.39 for  $\geq 2$ /week vs.  $< 1$ /week,  $P = 0.004$  for trend) and hot dogs (1.28, 1.09-1.50 for  $\geq 2$ /week vs.  $< 1$ /week,  $P = 0.003$  for trend). These results remained significant after further adjustment for intakes of dietary fiber, magnesium, glycemic load, and total fat. Intakes of total cholesterol, animal protein, and heme iron were also significantly associated with a higher risk of type 2 diabetes. **CONCLUSIONS**-Our data indicate that higher consumption of total red meat, especially various processed meats, may increase risk of developing type 2 diabetes in women. PMID: 15333470 [PubMed - in process]

13: Int J Cancer. 2004 Sep 20;111(5):698-704.

**Gene transfer to cervical cancer with fiber-modified adenoviruses.**

Rein DT, Breidenbach M, Wu H, Han T, Haviv YS, Wang M, Kirby TO, Kawakami Y, Dall P, Alvarez RD, Curiel DT.

Successful adenoviral (Ad) vector-mediated strategies for cancer gene therapy mandate gene-delivery systems that are capable of achieving efficient gene delivery in vivo. In many cancer types, in vivo gene-transfer efficiency remains limited due to the low or highly variable expression of the primary Ad receptor, the coxsackie Ad receptor (CAR). In this study, we evaluated the expression of CAR on cervical cancer cells as well as CAR-independent targeting strategies to integrins (Ad5.RGD), heparan sulfate proteoglycans (Ad5.pK7) or both (Ad5.RGD.pK7). We used a panel of established cervical cancer cell lines and primary cervical cancer cells isolated from patients to quantify the expression of CAR mRNA and to evaluate the gene-transfer efficiency of fiber-modified Ads. Of the fiber-modified vectors, Ad5.pK7 and Ad5.RGD.pK7 displayed significantly enhanced gene-transfer efficiency in vitro. Gene-delivery efficiency in vivo was evaluated using an s.c. cervical cancer mouse model. Ad5.RGD.pK7 significantly improves tumor targeting in vivo, resulting in a significantly improved tumor/liver ratio in mice. Our results suggest that the double-modified Ad5.RGD.pK7 vector enhances gene transfer to clinically relevant cervical cancer substrates, while the infectivity of nontarget cells in the mouse is not increased and comparable to Ad5. The fiber-modified virus described here can help achieve higher clinical efficacy of cervical cancer gene therapy. Copyright 2004 Wiley-Liss, Inc.

PMID: 15252838 [PubMed - indexed for MEDLINE]

14: Int J Obes Relat Metab Disord. 2004 Sep;28(9):1124-33.

**Pretreatment predictors of attrition and successful weight management in women.**

Teixeira PJ, Going SB, Houtkooper LB, Cussler EC, Metcalfe LL, Blew RM, Sardinha LB, Lohman TG.

**OBJECTIVE:** This study analyzed baseline behavioral and psychosocial differences between successful and nonsuccessful participants in a behavioral weight management program. Success was defined by commonly used health-related criteria (5% weight loss). Noncompletion was also used as a marker of a failed attempt at weight control. **SUBJECTS:** A total of 158 healthy overweight and obese women (age, 48.0 $\pm$ 4.5 y; BMI, 31.0 $\pm$ 3.8 kg/m<sup>2</sup>; body fat, 44.5 $\pm$ 5.3%). **INTERVENTION:** Subjects participated in a 16-week lifestyle weight loss program consisting of group-based behavior therapy to improve diet and increase physical activity, and were followed for 1 y after treatment. **METHODS:** At baseline, all

women completed a comprehensive behavioral and psychosocial battery assessing dieting/weight history, dietary intake and eating behaviors, exercise, self-efficacy, outcome evaluations, body image, and other variables considered relevant for weight management. Participants who maintained a weight loss of 5% or more at 16 months (or 10% or more of initial fat mass) were classified as successful.

Nonsuccessful participants were those who dropped out and completers who had not lost weight at follow-up. RESULTS: Of all participants, 30% (n=47) did not complete initial treatment and/or missed follow-up assessments (noncompleters).

Noncompletion was independently associated with more previous weight loss attempts, poorer quality of life, more stringent weight outcome evaluations, and lower reported carbohydrate intake at baseline. In logistic regression, completion status was predicted correctly in 84% of all cases ( $\chi^2=45.5$ ,  $P<0.001$ ), using baseline information only. Additional predictors of attrition were initial weight, exercise minutes, fiber intake, binge eating, psychological health, and body image. A large variation in weight loss/maintenance results was observed (range: 37.2 kg for 16-month weight change). Independent baseline predictors of success at 16 months were more moderate weight outcome evaluations, lower level of previous dieting, higher exercise self-efficacy, and smaller waist-to-hip ratio. Success status at follow-up was predicted correctly in 74% of all starting cases ( $\chi^2=33.6$ ,  $P<0.001$ ).

CONCLUSION : Psychosocial and behavioral variables (eg, dieting history, dietary intake, outcome evaluations, exercise self-efficacy, and quality of life) may be useful as pretreatment predictors of success level and/or attrition in previously overweight and mildly obese women who volunteer for behavioral weight control programs. These factors can be used in developing readiness profiles for weight management, a potentially important tool to address the issue of low success/completion rates in the current management of obesity.

PMID: 15263921 [PubMed - in process]

15: J Am Diet Assoc. 2004 Sep;104(9):1393-7.

**Reemergence of pica following gastric bypass surgery for obesity: A new presentation of an old problem.**

Kushner RF, Gleason B, Shanta-Retelny V.

Abstract Pica, the compulsive ingestion of nonnutritive substances, has been a fascinating and poorly understood phenomenon for centuries. Pagophagia, or ice eating, is one of the most common forms of pica and is closely associated with the development of iron-deficiency anemia. Although this condition has been well described among pregnant women and malnourished children, particularly in developing countries, it has not been previously reported to occur following gastric bypass surgery for treatment of severe obesity. This article presents two cases of women who experienced a recurrence of pagophagia following gastric bypass surgery, along with an updated review of the literature.

PMID: 15354156 [PubMed - in process]

16: J Am Geriatr Soc. 2004 Sep;52(9):1479-86.

**Long-term prediction of incident hip fracture risk in elderly white women: study of osteoporotic fractures.**

Taylor BC, Schreiner PJ, Stone KL, Fink HA, Cummings SR, Nevitt MC, Bowman PJ, Ensrud KE.

Objectives: To identify independent risk factors for first hip fracture over 10 years of follow-up. Design: Prospective cohort study. Setting: Four U.S. clinical centers. Participants: A total of 6,787 women aged 66 and older in the Study of Osteoporotic Fractures. Measurements: Total hip bone mineral density (BMD) using dual-energy x-ray absorptiometry and a comprehensive set of potential risk factors were collected. Incident hip fractures were identified prospectively and confirmed using

radiographic report. Results: Six hundred two women (8.9%) had a hip fracture during a mean +/-standard deviation (SD) follow-up of 10.1+/-3.2 years. Older age, previous self-reported fracture after age 50, maternal history of hip fracture after age 50, greater height at age 25, impaired cognition, slower walking speed, nulliparity, type II diabetes mellitus, Parkinson's disease, and depth perception each independently predicted a 1.17- to 1.83-fold increase in hip fracture risk, whereas each SD (0.13 g/cm<sup>2</sup>) decrease in hip BMD was independently associated with a 1.84-fold increase in risk. Lower body mass index also was associated with an increased risk of hip fracture, although lower hip BMD largely explained this association. Conclusion: Although hip BMD is strongly related to hip fracture risk in elderly white women, other clinical risk factors also are independent predictors of long-term risk and provide additional insight into the prevention of fracture in high-risk women. Clinicians should be alert to factors other than BMD that place older women at a high risk of hip fracture.  
PMID: 15341549 [PubMed - in process]

17: J Appl Physiol. 2004 Sep;97(3):991-7. Epub 2004 May 07.

**Effects of insulin resistance on substrate utilization during exercise in overweight women.**

Braun B, Sharoff C, Chipkin SR, Beaudoin F.

During exercise, obese individuals oxidize less glycogen and more fat than their lean counterparts, but the shift in substrate use may be mediated by insulin resistance rather than body fat per se. In addition, individuals with Type 2 diabetes are not resistant to contraction-mediated glucose uptake during exercise, but in vivo studies uncomplicated by hyperglycemia are lacking. The purpose of this study was to compare blood glucose uptake and the balance between carbohydrate and fat utilization during exercise in insulin-resistant (IR) and insulin-sensitive (IS) women of equivalent body fatness and maximal oxygen consumption (VO<sub>2</sub> max). Twelve overweight sedentary women were divided into two groups with similar body mass index (IR = 28.5 +/- 1.6, IS = 27.5 +/- 1.9), lean mass (IR = 42.4 +/- 1.8 kg, IS = 41.5 +/- 1.9 kg), and VO<sub>2</sub> max (IR = 29.7 +/- 3.5 ml.kg<sup>-1</sup>.min<sup>-1</sup>, IS = 30.7 +/- 3.9 ml.kg<sup>-1</sup>.min<sup>-1</sup>) but a markedly different composite insulin sensitivity index (IR = 3.0 +/- 0.7, IS = 7.7 +/- 0.9). Blood glucose kinetics and substrate oxidation were assessed by stable isotope dilution and indirect calorimetry during 50 min of treadmill walking at 45% VO<sub>2</sub> max. Total carbohydrate oxidation and estimated muscle glycogen use were significantly lower in the IR group. Blood glucose uptake was the same in the IR and IS groups. These data suggest that insulin resistance, independent of body fat, spares muscle glycogen and shifts substrate oxidation toward less carbohydrate use during exercise. Insulin-resistant individuals with normoglycemia appear to have no defect in blood glucose uptake during exercise.  
PMID: 15133003 [PubMed - in process]

18: J Clin Endocrinol Metab. 2004 Sep;89(9):4615-9.

**Hormone therapy impairs endothelial function in postmenopausal women with type 2 diabetes mellitus treated with rosiglitazone.**

Honisett SY, Stojanovska L, Sudhir K, Kingwell BA, Dawood T, Komesaroff PA.

Diabetes and ovarian senescence are associated with impaired endothelial function and altered arterial mechanical properties. Alterations in normal vascular structure and functioning are the primary cause of mortality and morbidity with type 2 diabetes. Similarly, after menopause, women experience an increase in the rate of cardiovascular disease. Thiazolidinediones have exhibited a number of antiatherogenic actions in populations with type 2 diabetes. The effect of thiazolidinediones in combination with hormone therapy (HT) in postmenopausal women is, however, unknown. To assess whether HT (transdermal estradiol 50

microg and micronized progesterone (100 mg/d) affects vascular function, 21 women receiving rosiglitazone were randomly assigned to receive HT or placebo for 12 wk in a double-blind crossover design. Measures of glycemic control, lipids, blood pressure, flow-mediated dilation, and distensibility index were undertaken at baseline and after each treatment. As a result, flow-mediated dilation was significantly reduced (15.3 +/- 3.8 to 6.6 +/- 1.6%, P = 0.02) with HT, whereas lipids, blood pressure, and distensibility index were unchanged. Placebo had no significant affect on any variables. Thus, the addition of HT to rosiglitazone treatment attenuates endothelial function without altering other cardiovascular risk factors. Caution should, therefore, be exercised when considering combined treatment with thiazolidinedione and HT. PMID: 15356071 [PubMed - in process]

19: J Urol. 2004 Sep;172(3):989-92.

**Effects of diabetes on female voiding behavior.**

Lee WC, Wu HP, Tai TY, Liu SP, Chen J, Yu HJ.

**PURPOSE:** We studied voiding behavior in women with type 2 diabetes vs nondiabetic female controls and examined factors associated with voiding dysfunction in patients with diabetes. **MATERIALS AND METHODS:** After eliminating coexisting medical factors that could affect voiding function we evaluated voiding behaviors in 194 female patients with diabetes treated regularly at a diabetic clinic and 162 control women using a lower urinary tract symptom questionnaire based mainly on the American Urological Association Symptom Index questionnaire and free flow analyses with post-void residual urine estimates. Emptying efficiency was defined as 100% x volume voided/(volume voided + post-void residual urine). **RESULTS:** Compared with controls patients with diabetes had significantly higher nocturia scores (p = 0.003), weaker urinary streams (p = 0.02), less voided volumes (220 +/- 97 vs 280 +/- 104 ml, p = 0.04) and lower maximal flow rates (19.4 +/- 8.4 vs 25.9 +/- 8.5 ml per second, p <0.001). Remarkable residual urine (100 ml or greater) was detected in 1.8% of controls vs 13.9% of patients. After controlling for age and voided volume diabetes was significantly associated with a decrease in baseline maximum flow of 4.5 ml per second (95% CI 2.9 to 6.2). In patients with diabetes peripheral neuropathy was an independent factor associated with the decrease in emptying efficiency (p = 0.03). **CONCLUSIONS:** Diabetes significantly altered voiding patterns in a significant proportion of women treated at the diabetic clinic. Peripheral neuropathy is an important factor associated with diabetic voiding dysfunction. PMID: 15311019 [PubMed - indexed for MEDLINE]

20: JAMA. 2004 Sep 8;292(10):1195-204.

Comment in: JAMA. 2004 Sep 8;292(10):1234-5.

**Effect of galantamine hydrobromide in chronic fatigue syndrome: a randomized controlled trial.**

Blacker CV, Greenwood DT, Wesnes KA, Wilson R, Woodward C, Howe I, Ali T.

**CONTEXT:** There is no established pharmacological treatment for the core symptoms of chronic fatigue syndrome (CFS). Galantamine hydrobromide, an acetyl cholesterone inhibitor, has pharmacological properties that might benefit patients with CFS. **OBJECTIVE:** To compare the efficacy and tolerability of galantamine hydrobromide in patients with CFS. **DESIGN, SETTING, AND PATIENTS:** Randomized, double-blind trial conducted June 1997 through July 1999 at 35 outpatient centers in the United Kingdom (n = 17), United States (n = 14), the Netherlands (n = 2), Sweden (n = 1), and Belgium (n = 1) involving 434 patients with a clinical diagnosis of CFS (modified US Centers for Disease Control and Prevention criteria). **INTERVENTIONS:** A total of 89 patients were randomly assigned to receive 2.5 mg of galantamine hydrobromide; 86 patients, 5.0 mg; 91 patients, 7.5 mg; and 86

patients, 10 mg (these patients received medicine in the tablet form 3 times per day); a total of 82 patients received matching placebo tablets 3 times per day. MAIN OUTCOME MEASURES: The primary efficacy variable was the global change on the Clinician Global Impression Scale after 4, 8, 12, and 16 weeks of treatment. Secondary outcomes were changes in core symptoms of CFS on the Chalder Fatigue Rating Scale, the Fibromyalgia Impact Questionnaire, and the Pittsburgh Sleep Quality Index; changes in quality of life on the Nottingham Health Profile; and assessment of plasma-free cortisol levels and cognitive performance on a computer-based battery of tests. RESULTS: After 16 weeks, there were no statistically significant differences between any of the galantamine or placebo groups in clinical condition on the Clinician Global Impression Scale, or for any of the secondary end points. Exploratory regression analysis failed to detect any consistent prognostic factor that might have influenced the primary or any secondary outcome measures. CONCLUSION: This trial did not demonstrate any benefit of galantamine over placebo in the treatment of patients with CFS. Publication Types: Clinical Trial/Multicenter Study/Randomized Controlled Trial PMID: 15353532 [PubMed - indexed for MEDLINE]

21: JAMA. 2004 Sep 8;292(10):1188-94.

Comment in: JAMA. 2004 Sep 8;292(10):1232-4.

**Relationship of physical activity vs body mass index with type 2 diabetes in women.**

Weinstein AR, Sesso HD, Lee IM, Cook NR, Manson JE, Buring JE, Gaziano JM.

CONTEXT: Physical inactivity and body mass index (BMI) are established independent risk factors in the development of type 2 diabetes; however, their comparative importance and joint relationship with diabetes are unclear.

OBJECTIVE: To examine the relative contributions and joint association of physical activity and BMI with diabetes. DESIGN, SETTING, AND PARTICIPANTS: Prospective cohort study of 37 878 women free of cardiovascular disease, cancer, and diabetes with 6.9 years of mean follow-up. Weight, height, and recreational activities were reported at study entry. Normal weight was defined as a BMI of less than 25; overweight, 25 to less than 30; and obese, 30 or higher. Active was defined as expending more than 1000 kcal on recreational activities per week. MAIN OUTCOME MEASURE: Incident type 2 diabetes, defined as a new self-reported diagnosis of diabetes. RESULTS: During the follow-up, 1361 cases of incident diabetes occurred. Individually, BMI and physical activity were significant predictors of incident diabetes. Compared with normal-weight individuals, the multivariate-adjusted hazard ratio (HR) was 3.22 (95% confidence interval [CI], 2.69-3.87) for overweight individuals and 9.09 (95% CI, 7.62-10.8) for obese individuals. For overall activity (kilocalories expended per week), compared with the least active first quartile, the multivariate-adjusted HRs were 0.91 (95% CI, 0.79-1.06) for the second quartile, 0.86 (95% CI, 0.74-1.01) for the third, and 0.82 (95% CI, 0.70-0.97) for the fourth (P for trend = .01). In the combined analyses, overweight and obese participants, whether active or inactive, had significantly elevated risks, compared with normal-weight active individuals. The multivariate-adjusted HRs were 1.15 (95% CI, 0.83-1.59) for normal-weight inactive, 3.68 (95% CI, 2.63-5.15) for overweight active, 4.16 (95% CI, 3.05-5.66) for overweight inactive, 11.5 (95% CI, 8.34-15.9) for obese active, and 11.8 (95% CI, 8.75-16.0) for obese inactive participants. CONCLUSIONS: Although BMI and physical inactivity are independent predictors of incident diabetes, the magnitude of the association with BMI was greater than with physical activity in combined analyses. These findings underscore the critical importance of adiposity as a determinant of diabetes. PMID: 15353531 [PubMed - indexed for MEDLINE]

22: JAMA. 2004 Sep 8;292(10):1179-87.

Comment in: JAMA. 2004 Sep 8;292(10):1232-4.

**Relationship of physical fitness vs body mass index with coronary artery disease and cardiovascular events in women.**

Wessel TR, Arant CB, Olson MB, Johnson BD, Reis SE, Sharaf BL, Shaw LJ, Handberg E, Sopko G, Kelsey SF, Pepine CJ, Merz NB.

CONTEXT: Individual contributions of obesity and physical fitness (physical activity and functional capacity) to risk of coronary heart disease in women remain unclear. OBJECTIVE: To investigate the relationships of measures of obesity (body mass index [BMI], waist circumference, waist-hip ratio, and waist-height ratio) and physical fitness (self-reported Duke Activity Status Index [DASI] and Postmenopausal Estrogen-Progestin Intervention questionnaire [PEPI-Q] scores) with coronary artery disease (CAD) risk factors, angiographic CAD, and adverse cardiovascular (CV) events in women evaluated for suspected myocardial ischemia. DESIGN, SETTING, AND PARTICIPANTS: The National Heart, Lung, and Blood Institute-sponsored Women's Ischemia Syndrome Evaluation (WISE) is a multicenter prospective cohort study. From 1996-2000, 936 women were enrolled at 4 US academic medical centers at the time of clinically indicated coronary angiography and then assessed (mean follow-up, 3.9 [SD, 1.8] years) for adverse outcomes. MAIN OUTCOME MEASURES: Prevalence of obstructive CAD (any angiographic stenosis  $\geq$ 50%) and incidence of adverse CV events (all-cause death or hospitalization for nonfatal myocardial infarction, stroke, congestive heart failure, unstable angina, or other vascular events) during follow-up. RESULTS: Of 906 women (mean age, 58 [SD, 12] years) with complete data, 19% were of nonwhite race, 76% were overweight (BMI  $\geq$ 25), 70% had low functional capacity (DASI scores  $<$ 25, equivalent to  $\leq$ 7 metabolic equivalents [METs]), and 39% had obstructive CAD. During follow-up, 337 (38%) women had a first adverse event, 118 (13%) had a major adverse event, and 68 (8%) died. Overweight women were more likely than normal weight women to have CAD risk factors, but neither BMI nor abdominal obesity measures were significantly associated with obstructive CAD or adverse CV events after adjusting for other risk factors ( $P = .05$  to .88). Conversely, women with lower DASI scores were significantly more likely to have CAD risk factors and obstructive CAD (44% vs 26%,  $P < .001$ ) at baseline, and each 1-MET increase in DASI score was independently associated with an 8% (hazard ratio, 0.92; 95% confidence interval, 0.85-0.99;  $P = .02$ ) decrease in risk of major adverse CV events during follow-up. CONCLUSIONS: Among women undergoing coronary angiography for suspected ischemia, higher self-reported physical fitness scores were independently associated with fewer CAD risk factors, less angiographic CAD, and lower risk for adverse CV events. Measures of obesity were not independently associated with these outcomes.

Publication Types: Multicenter Study

PMID: 15353530 [PubMed - indexed for MEDLINE]

23: JAMA. 2004 Aug 25;292(8):927-34.

Comment in: JAMA. 2004 Aug 25;292(8):978-9.

**Sugar-sweetened beverages, weight gain, and incidence of type 2 diabetes in young and middle-aged women.**

Schulze MB, Manson JE, Ludwig DS, Colditz GA, Stampfer MJ, Willett WC, Hu FB.

CONTEXT: Sugar-sweetened beverages like soft drinks and fruit punches contain large amounts of readily absorbable sugars and may contribute to weight gain and an increased risk of type 2 diabetes, but these relationships have been minimally addressed in adults. OBJECTIVE: To examine the association between consumption of sugar-sweetened beverages and weight change and risk of type 2 diabetes in women. DESIGN, SETTING, AND PARTICIPANTS: Prospective cohort analyses conducted from 1991 to 1999 among women in the Nurses' Health Study II. The

diabetes analysis included 91,249 women free of diabetes and other major chronic diseases at baseline in 1991. The weight change analysis included 51,603 women for whom complete dietary information and body weight were ascertained in 1991, 1995, and 1999. We identified 741 incident cases of confirmed type 2 diabetes during 716,300 person-years of follow-up. MAIN OUTCOME MEASURES: Weight gain and incidence of type 2 diabetes. RESULTS: Those with stable consumption patterns had no difference in weight gain, but weight gain over a 4-year period was highest among women who increased their sugar-sweetened soft drink consumption from 1 or fewer drinks per week to 1 or more drinks per day (multivariate-adjusted means, 4.69 kg for 1991 to 1995 and 4.20 kg for 1995 to 1999) and was smallest among women who decreased their intake (1.34 and 0.15 kg for the 2 periods, respectively) after adjusting for lifestyle and dietary confounders. Increased consumption of fruit punch was also associated with greater weight gain compared with decreased consumption. After adjustment for potential confounders, women consuming 1 or more sugar-sweetened soft drinks per day had a relative risk [RR] of type 2 diabetes of 1.83 (95% confidence interval [CI], 1.42-2.36;  $P < .001$  for trend) compared with those who consumed less than 1 of these beverages per month. Similarly, consumption of fruit punch was associated with increased diabetes risk (RR for  $>$  or  $=$  1 drink per day compared with  $<$  1 drink per month, 2.00; 95% CI, 1.33-3.03;  $P = .001$ ). CONCLUSION: Higher consumption of sugar-sweetened beverages is associated with a greater magnitude of weight gain and an increased risk for development of type 2 diabetes in women, possibly by providing excessive calories and large amounts of rapidly absorbable sugars.

PMID: 15328324 [PubMed - indexed for MEDLINE]

24: Lancet. 2004 Sep 4;364(9437):875-82.

**Parkinsonism, premature menopause, and mitochondrial DNA polymerase gamma mutations: clinical and molecular genetic study.**

Luoma P, Melberg A, Rinne JO, Kaukonen JA, Nupponen NN, Chalmers RM, Oldfors A, Rautakorpi I, Peltonen L, Majamaa K, Somer H, Suomalainen A.

BACKGROUND: Mutations in the gene encoding mitochondrial DNA polymerase gamma (POLG), the enzyme that synthesises mitochondrial DNA (mtDNA), have been associated with a mitochondrial disease-autosomal dominant or recessive progressive external ophthalmoplegia-and multiple deletions of mtDNA. Mitochondrial dysfunction is also suspected to participate in the pathogenesis of Parkinson's disease. However, no primary gene defects affecting mitochondrial proteins causing mendelian transmission of parkinsonism have been characterised. We aimed to analyse the gene sequence of POLG in patients with progressive external ophthalmoplegia and their healthy relatives. METHODS: In seven families of various ethnic origins we assessed patients with progressive external ophthalmoplegia and unaffected individuals by clinical, biochemical, morphological, and molecular genetic characterisation and positron emission tomography (PET). FINDINGS: We recorded mutations in POLG in members of all seven families. Clinical assessment showed significant cosegregation of parkinsonism with POLG mutations ( $p < 0.0001$ ), and PET findings were consistent with dopaminergic neuron loss. Post-mortem examination in two individuals showed loss of pigmented neurons and pigment phagocytosis in substantia nigra without Lewy bodies. Furthermore, most women with progressive external ophthalmoplegia had early menopause-before age 35 years. The POLG gene defect resulted in secondary accumulation of mtDNA deletions in patients' tissues. INTERPRETATION: Dysfunction of mitochondrial POLG causes a severe progressive multisystem disorder including parkinsonism and premature menopause, which are not typical of mitochondrial disease. Cosegregation of parkinsonism and POLG mutations in our families suggests that when defective, this gene can underlie mendelian transmission

of parkinsonism. RELEVANCE TO PRACTICE: Awareness that mitochondrial POLG mutations can underlie parkinsonism is important for clinicians working in diagnosis of movement disorders, as well as for studies of the genetics of Parkinson's disease. Further, progressive external ophthalmoplegia with muscle weakness and neuropathy can mask symptoms of parkinsonism, and clinicians should pay special attention to detect and treat parkinsonism in those individuals.  
PMID: 15351195 [PubMed - in process]

25: Maturitas. 2004 Sep 24;49(1):67-78.

**Hormones and mammographic breast density.**

Warren R.

Mammographic density reveals information about the hormonal environment along with the heritability in which breast cancer develops. This is made possible by the widespread use of population screening by mammography. Increasingly this is an important observation not just for population studies, which reveal disease determinants, but also for the individual. Density reveals the effect of the intrinsic hormonal environment and its background genetics, and also the effect of pharmaceuticals-agents used for disease control and prevention and hormone replacement therapy (HRT) used for well-being around the menopause. Increasingly this focus on the individual will need methods of measurement of density that can be monitored with greater accuracy than the widely used BI-RADS 4 categories. For this purpose studies are under way to measure volume of dense tissue as a continuous variable. In due course, measurement of density will be used as a biomarker of risk, employed in risk models and to monitor interventions. Before this can happen more knowledge will be needed of the change occurring naturally through the menopause and the differences between individuals. This will need specific study backed up with detailed information about the patient on large numbers of women and their mammograms. Currently the widespread use of HRT has increased the prevalence of the dense patterns and potentially may adversely affect the effectiveness of mammographic screening programmes. There is a large literature recording this from which we see that combined continuous preparations of oestrogen progestin are more likely to cause increased density than oestrogen alone or tibolone. Breast density, measured more accurately, has the potential to be an important adjunct to risk estimation and to monitor interventions for breast cancer prevention with pharmaceuticals (such as SERMS) and by change in lifestyle behaviours.  
PMID: 15351098 [PubMed - in process]

26: Maturitas. 2004 Sep 24;49(1):51-7.

**Postmenopausal hormone therapy and the risk of breast cancer; A clinician's view.**

Speroff L.

Reports from the Women's Health Initiative (WHI) and the Million Women Study have indicated that postmenopausal hormone therapy increases the risk of breast cancer. At this point in time, it is not certain whether these data reflect a small increase in risk or an impact of hormone therapy on pre-existing tumors. The purpose of this review is to provide an analysis of the epidemiologic data that can help the clinician inform patients and assist patients in their decision-making.  
PMID: 15351096 [PubMed - in process]

27: Maturitas. 2004 Sep 24;49(1):44-50.

**Postmenopausal hormone therapy and the risk of breast cancer: the view of an epidemiologist.**

Li CI.

Objectives: Postmenopausal hormone therapy (PMH) has been widely used by menopausal women living in western countries for the past several decades. Numerous studies have evaluated the relationship between PMH and breast cancer risk because steroid hormones have been implicated in breast cancer etiology. Methods: A review of selected studies was performed to evaluate the history of investigations of the association between PMH and breast cancer, with a focus on studies evaluating different PMH regimens and different histologic types of breast cancer. Results: Though studies conducted before the early 1990s suggest that both combined estrogen and progestin (E + P) PMH and unopposed estrogen (E) PMH are associated with an increased risk of breast cancer, more recent observational studies suggest that E + P, particularly current use for 5 years or longer, is more strongly associated with breast cancer risk than is unopposed E. Results from the Women's Health Initiative (WHI) randomized trials have confirmed these findings as they indicate that E + P is causally related to breast cancer (relative risk (RR) = 1.24; 95% confidence interval (CI): 1.01-1.54), while E alone is not (RR = 0.77; 95% CI: 0.59-1.01). Conclusions: There is clear and consistent evidence that use of E + P increases a woman's risk of breast cancer. Alternatively, current evidence suggests that use of unopposed E is not as strongly associated with breast cancer risk. Further studies are needed though to examine how different PMH regimens, doses, and methods of delivery are related to breast cancer risk, and how PMH impacts the risks of different types of breast cancer.

PMID: 15351095 [PubMed - in process]

28: Med Sci Sports Exerc. 2004 Sep;36(9):1484-1491.

Physical Activity Levels among Breast Cancer Survivors.

Irwin ML, McTiernan A, Bernstein L, Gilliland FD, Baumgartner R, Baumgartner K, Ballard-Barbash R.

IRWIN, M. L., A. MCTIERNAN, L. BERNSTEIN, F. D. GILLILAND, R. BAUMGARTNER, K. BAUMGARTNER, and R. BALLARD-BARBASH. Physical Activity Levels among Breast Cancer Survivors. Med. Sci. Sports Exerc., Vol. 36, No. 9, pp. 1484-1491, 2004.

INTRODUCTION:: Obesity and weight gain are negative prognostic factors for breast cancer survival. Physical activity (PA) prevents weight gain and may decrease obesity. Little information exists on PA levels among cancer survivors. We assessed PA, including the proportion of breast cancer survivors engaging in recommended levels, by categories of adiposity, age, disease stage, and ethnicity in 806 women with stage 0-IIIa breast cancer participating in the Health, Eating, Activity, and Lifestyle Study. METHODS:: Black, non-Hispanic white, and Hispanic breast cancer survivors were recruited into the study through Surveillance Epidemiology End Results registries in New Mexico, Western Washington, and Los Angeles County, CA. Types of sports and household activities and their frequency and duration within the third yr after diagnosis were assessed during an in-person interview. RESULTS:: Thirty-two percent of breast cancer survivors participated in recommended levels of PA defined as 150 min.wk of moderate- to vigorous-intensity sports/recreational PA. When moderate-intensity household and gardening activities were included in the definition, 73% met the recommended level of PA. Fewer obese breast cancer survivors met the recommendation than overweight and lean breast cancer survivors ( $P < 0.05$ ). Fewer black breast cancer survivors met the recommendation compared with non-Hispanic white and Hispanic breast cancer survivors ( $P < 0.05$ ). CONCLUSIONS:: Most of the breast cancer survivors were not meeting the PA recommendations proposed for the general adult population. Efforts to encourage and facilitate PA among these women would be an important tool to decrease obesity, prevent postdiagnosis weight gain, and improve breast cancer prognosis. PMID: 15354027 [PubMed - as supplied by publisher]

29: Metabolism. 2004 Sep;53(9):1192-6.

**The effects of exercise training on abdominal visceral fat, body composition, and indicators of the metabolic syndrome in postmenopausal women with and without estrogen replacement therapy: The HERITAGE family study.**

Green JS, Stanforth PR, Rankinen T, Leon AS, Rao DC, Skinner JS, Bouchard C, Wilmore JH.

The purpose of this research was to investigate the effects of a priori estrogen replacement therapy (ERT) and endurance exercise training in postmenopausal women on abdominal visceral fat (AFV) and other selected variables related to body composition and the metabolic syndrome (MS). Forty-eight healthy and previously sedentary postmenopausal women (mean age, 54.3 years) who were enrolled in the HERITAGE Family Study (HFS) served as subjects. Of these 48 women, 18 were currently taking ERT and the remaining 30 were taking no supplemental estrogen (NHRT). Computed tomography (CT) scans were used to assess AVF as well as total abdominal fat (TAF) and abdominal subcutaneous fat (ASF). Body mass index (BMI) and waist-to-hip ratios (WHR) were calculated while body fat percentage (%FAT) and total fat mass (FATM) was assessed using underwater weighing. Blood assays for HDL-cholesterol (HDL-C), LDL-cholesterol (LDL-C), and triglycerides (TG) were conducted at a Centers for Disease Control (CDC) certified laboratory, while blood pressure measurements were assessed using an automated system. All measurements were obtained in duplicate before and after a regimen of endurance exercise training. Analysis of variance (ANOVA) showed AVF to be an average of 31.6 cm<sup>2</sup> less in the women receiving ERT, but lost statistical significance when AVF was adjusted for FATM. Mean values for TAF, ASF, and waist girth were also less in the women receiving ERT, but only waist girth achieved statistical significance. No differences were found in BMI or %FAT, but mean WHR was 5% smaller in the ERT group. Baseline values for HDL-C was higher and LDL-C lower in the ERT group. Prevalence of the MS tended to be greater in the NHRT group, but did not achieve statistical significance. There were no differences in training responses in any of the body composition variables between groups, however, in the ERT group LDL-C decreased with training while TG increased. It was concluded that postmenopausal women taking ERT tended to have lower values of AVF and other indicators of body composition, a more favorable lipid profile, and a slightly reduced risk of the MS when compared with women not taking supplemental hormones. Also exercise training did not improve the overall MS status of either group, as LDL-C status improved in the ERT group while TG decreased in the NHRT group.  
PMID: 15334383 [PubMed - in process]

30: N Engl J Med. 2004 Sep 2;351(10):963-70.

Comment in: N Engl J Med. 2004 Sep 2;351(10):1021-3.

**Tamoxifen with or without breast irradiation in women 50 years of age or older with early breast cancer.**

Fyles AW, McCready DR, Manchul LA, Trudeau ME, Merante P, Pintilie M, Weir LM, Olivetto IA.

**BACKGROUND:** We determined the effect of breast irradiation plus tamoxifen on disease-free survival and local relapse in women 50 years of age or older who had T1 or T2 node-negative breast cancer. **METHODS:** Between December 1992 and June 2000, 769 women with early breast cancer (tumor diameter, 5 cm or less) were randomly assigned to receive breast irradiation plus tamoxifen (386 women) or tamoxifen alone (383 women). The median follow-up was 5.6 years. **RESULTS:** The rate of local relapse at five years was 7.7 percent in the tamoxifen group and 0.6 percent in the group given tamoxifen plus irradiation (hazard ratio, 8.3; 95 percent confidence interval, 3.3 to 21.2;  $P < 0.001$ ), with corresponding five-year disease-free survival rates of 84 percent and 91 percent ( $P = 0.004$ ). A planned subgroup analysis

of 611 women with T1, receptor-positive tumors indicated a benefit from radiotherapy (five-year rates of local relapse, 0.4 percent with tamoxifen plus radiotherapy and 5.9 percent with tamoxifen alone;  $P < 0.001$ ). Overall, there was a significant difference in the rate of axillary relapse at five years (2.5 percent in the tamoxifen group and 0.5 percent in the group given tamoxifen plus irradiation,  $P = 0.049$ ), but no significant difference in the rates of distant relapse or overall survival. CONCLUSIONS: As compared with tamoxifen alone, radiotherapy plus tamoxifen significantly reduces the risk of breast and axillary recurrence after lumpectomy in women with small, node-negative, hormone-receptor-positive breast cancers. Copyright 2004 Massachusetts Medical Society  
Publication Types: Clinical Trial/Multicenter Study/Randomized Controlled Trial  
PMID: 15342804 [PubMed - indexed for MEDLINE]

31: Neurology. 2004 Aug 24;63(4):658-63.

**Diabetes, impaired fasting glucose, and development of cognitive impairment in older women.**

Yaffe K, Blackwell T, Kanaya AM, Davidowitz N, Barrett-Connor E, Krueger K.

OBJECTIVE: To investigate the association between diabetes and impaired fasting glucose (IFG) and cognition and risk of developing both dementia and mild cognitive impairment (MCI) in older women. METHODS: The authors analyzed data from a 4-year randomized trial of raloxifene among 7,027 osteoporotic postmenopausal women (mean age, 66.3 years) at 178 sites. Diabetes was defined by history, fasting blood glucose  $\geq 7.0$  mmol/L ( $\geq 126$  mg/dL), or use of hypoglycemic agents; IFG was defined as fasting glucose  $< 7.0$  mmol/L but  $> 6.11$  mmol/L (110 mg/dL); all others were considered to have normal glucose (NG). The main outcome was baseline and 4-year change on five standardized cognitive tests (z scores with lower scores indicating worse performance) and risk of developing clinically significant impairment (dementia, mild cognitive impairment, or very low cognitive score). RESULTS: A total of 267 (3.8%) women had diabetes and 297 (4.2%) had IFG. Women with IFG had worse baseline cognitive scores compared to women with NG but better scores than diabetics (age-adjusted composite z score based on five tests: NG 0.40, 95% CI 0.30 to 0.49; IFG 0.14, 95% CI -0.36 to 0.64; diabetics -0.78, 95% CI -1.23 to -0.33;  $p < 0.001$ ). There was greater 4-year decline among diabetics (age and treatment-adjusted composite z score: NG -0.05, 95% CI -0.16 to 0.05; IFG 0.11, 95% CI -0.53 to 0.75; diabetics -1.00, 95% CI -1.50 to -0.50;  $p = 0.001$ ). Further adjustment for education, race, and depression led to similar results. Risk of developing cognitive impairment among women with IFG or diabetes was increased by almost twofold (age and treatment-adjusted OR = 1.64; 95% CI 1.03 to 2.61 for IFG; OR = 1.79; 95% CI 1.14 to 2.81 for diabetics). CONCLUSIONS: Diabetic as well as pre-diabetic women have impaired cognitive performance and greater risk of developing cognitive impairment. PMID: 15326238 [PubMed - in process]

32: Obstet Gynecol. 2004 Sep;104(3):571-8.

**Accuracy of transvaginal ultrasonography in diabetic or obese women with postmenopausal bleeding.**

van Doorn LC, Dijkhuizen FP, Kruitwagen RF, Heintz AP, Kooi GS, Mol BW; DUPOMEB (Dutch Study in Postmenopausal Bleeding).

OBJECTIVE: We sought to assess the accuracy of endometrial thickness measurement in the diagnosis of endometrial cancer in patients with obesity, diabetes, and hypertension and to evaluate whether patient characteristics influence endometrial thickness irrespective of the final diagnosis. METHODS: This was a prospective study of women not using hormone replacement therapy who presented with postmenopausal bleeding at 8 hospitals in The Netherlands. All women

underwent transvaginal ultrasonography and, in the event that the endometrial thickness (double layer) was more than 4 mm, subsequent endometrial sampling. The performance of endometrial thickness measurement in the diagnosis of atypical hyperplasia and endometrial cancer was evaluated in subgroups of patients with diabetes, hypertension, and obesity by using receiver operating characteristic analysis. RESULTS: Overall, we included 594 consecutive women, of whom 62 (10%) had endometrial carcinoma and 6 (1%) had atypical hyperplasia. In these women, transvaginal ultrasonography had an area under the receiver operating characteristic curve of 0.87 (standard error [SE] 0.03). In the absence of (pre)malignancy, women with diabetes or obesity were found to have thicker endometria than women without these risk factors, whereas in women with a (pre)malignancy, this difference was not present. The area under the receiver operating characteristic curve decreased to 0.74 (SE 0.05) and 0.75 (SE 0.07) in diabetic women and obese women, respectively. The presence or absence of hypertension had no impact on the accuracy of transvaginal ultrasonography. CONCLUSION: In view of the decreased diagnostic accuracy in diabetic women and obese women, the clinical value of transvaginal endometrial thickness measurement in these women is questionable. PMID: 15339771 [PubMed - in process]

33: Obstet Gynecol. 2004 Sep;104(3):452-8.

**Prevalence and characteristics of irritable bowel syndrome among women with chronic pelvic pain.**

Williams RE, Hartmann KE, Sandler RS, Miller WC, Steege JF.

OBJECTIVE: We sought to evaluate whether there are unique characteristics associated with irritable bowel syndrome (IBS) within a population that has chronic pelvic pain. METHODS: This cross-sectional study of new referral patients attending a pelvic pain clinic between 1993 and 2000 (N = 987) evaluated characteristics associated with IBS at entry to the clinic. The characteristics that we evaluated included demographic characteristics, clinical diagnoses, history of abuse, depression, pain, and prior abdominal surgeries. RESULTS: Thirty-five percent of chronic pelvic pain patients had IBS defined by Rome I criteria. Age 40 years or older (odds ratio [OR] = 1.98, 95% confidence interval [CI]: 1.27, 3.11), muscular back pain (OR = 5.37, 95% CI: 0.98, 29.29), Symptom Checklist-90 global index score in top quartile (OR = 1.77, 95% CI: 1.09, 2.86), depression (OR = 1.93, 95% CI: 1.24, 3.01), 6 or more pain sites (OR = 1.67, 95% CI: 1.01, 2.78), and history of adult physical abuse (OR = 1.51, 95% CI: 1.01, 2.26) were associated with IBS in the final reduced multivariable model. CONCLUSION: Specific characteristics distinguish women with IBS suggesting that IBS and chronic pelvic pain are not simply manifestations of the same disorder. Our findings could help physicians attempt to effectively treat women with IBS and chronic pelvic pain. Physicians could diagnose and treat IBS in conjunction with treatment for chronic pelvic pain. PMID: 15339753 [PubMed - in process]

34: Obstet Gynecol Surv. 2004 Sep;59(9):655-6.

**Gynecologic surgery in octogenarians and nonagenarians.**

Parker DY, Burke JJ 2nd, Gallup D.

To evaluate the risks associated with gynecologic surgery in elderly women, the authors reviewed the medical charts of all patients 80 years of age and older (n = 62) who had undergone gynecologic surgery at their institution between January 1995 and September 2000. The women ranged in age from 80 to 94 years. Of the total 77 procedures performed (10 patients had more than 1 procedure), 49 were major and 28 were minor. Cancer or suspected cancer was the indication for surgery in 58 patients. Forty-one patients underwent some type of hysterectomy, including 36 abdominal procedures, 3 vaginal hysterectomies, and 2 laparoscopically assisted

vaginal hysterectomies. In all, there were 34 laparotomies, 19 vaginal operations, and 24 vulvar procedures. Major surgical cases had a mean operating time of 151 minutes and minor procedures had a mean 30 minutes of operating time. Average blood losses were 269 mL in major cases and 45 mL in minor cases. General anesthesia was used for 74 of the 77 surgeries. Average times for anesthesia were 189 minutes in major cases and 56 minutes in minor cases. Most patients had other medical conditions; the average number of concurrent illnesses was 3.86. The most common were hypertension (59%), arthritis (40%), and diabetes (9%). Over half of the patients (59%) who underwent minor procedures were discharged the same day. The average length of hospital stay for the remaining women was 3.6 days. Eleven patients (14%) had a perioperative complication. Combativeness and disorientation with sundowning developed in 2 patients. Other complications included 1 patient each with fever, ileus, oliguria, elevated blood pressure, congestive heart failure/pneumonia, atrial fibrillation, acute myocardial infarction, and pneumonia. In addition, 1 patient was bleeding from the incision site in the recovery room and was taken to the operating room for exploration and reclosure of the incision.  
PMID: 15329554 [PubMed - in process]

35: Soc Sci Med. 2004 Sep;59(5):1035-45.

**'I am not the kind of woman who complains of everything': illness stories on self and shame in women with chronic pain.**

Werner A, Isaksen LW, Malterud K.

In this study, we explore issues of self and shame in illness accounts from women with chronic pain. We focused on how these issues within their stories were shaped according to cultural discourses of gender and disease. A qualitative study was conducted with in-depth interviews including a purposeful sampling of 10 women of varying ages and backgrounds with chronic muscular pain. The women described themselves in various ways as 'strong', and expressed their disgust regarding talk of illness of other women with similar pain. The material was interpreted within a feminist frame of reference, inspired by narrative theory and discourse analysis. We read the women's descriptions of their own (positive) strength and the (negative) illness talk of others as a moral plot and argumentation, appealing to a public audience of health personnel, the general public, and the interviewer: As a plot, their stories attempt to cope with psychological and alternative explanations of the causes of their pain. As performance, their stories attempt to cope with the scepticism and distrust they report having been met with. Finally, as arguments, their stories attempt to convince us about the credibility of their pain as real and somatic rather than imagined or psychological. In several ways, the women negotiated a picture of themselves that fits with normative, biomedical expectations of what illness is and how it should be performed or lived out in 'storied form' according to a gendered work of credibility as woman and as ill. Thus, their descriptions appear not merely in terms of individual behaviour, but also as organized by medical discourses of gender and diseases. Behind their stories, we hear whispered accounts relating to the medical narrative about hysteria; rejections of the stereotype medical discourse of the crazy, lazy, illness-fixed or weak woman.  
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**Prospective study of major dietary patterns and stroke risk in women.**

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BACKGROUND AND PURPOSE: Many foods have been suggested to influence the risk of stroke. However, no previous studies have examined the relationship between overall dietary patterns and risk of stroke. METHODS: Using dietary information collected in 1984 from 71,768 women aged 38 to 63 years without a history of

cardiovascular disease or diabetes in 1984, we conducted factor analysis and identified 2 major dietary patterns: "prudent" and "Western." We calculated scores for each participant for each pattern and prospectively examined their associations with stroke risk using a proportional hazard model, adjusting for other stroke risk factors. RESULTS: The prudent pattern was characterized by higher intakes of fruits, vegetables, legumes, fish, and whole grains, whereas the Western pattern by higher intakes of red and processed meats, refined grains, and sweets and desserts. During 14 years of follow-up, we identified 791 incidents of stroke, with 476 ischemic and 189 hemorrhagic strokes. After adjusting for potential confounders, we observed a relative risk (RR) of 1.58 (95% CI, 1.15 to 2.15; P=0.0002 for trend) for total strokes and 1.56 (95% CI, 1.05 to 2.33; P=0.02 for trend) for ischemic stroke when comparing the highest with lowest quintiles of the Western pattern. For the prudent pattern, the RRs comparing extreme quintiles were 0.78 (95% CI, 0.61 to 1.01) for total stroke and 0.74 (95% CI, 0.54 to 1.02) for ischemic stroke. CONCLUSIONS: These data suggest that a dietary pattern typified by higher intakes of red and processed meats, refined grains, and sweets and desserts may increase stroke risk, whereas a diet higher in fruits and vegetables, fish, and whole grains may protect against stroke.

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