90346536

A risk of malignancy index incorporating CA 125, ultrasound and menopausal status for the accurate preoperative diagnosis of ovarian cancer

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Age, ultrasound score, menopausal status, a clinical impression score and serum CA 125 level were assessed to see how they could best distinguish between patients with benign (n = 101) and malignant (n = 42) pelvic masses. Each criteria used alone provided statistically significant discrimination. The most useful individual criteria were a serum CA 125 level of 30 U/ml (sensitivity 81%, specificity 75%) and an ultrasound score of 2 (sensitivity 71%, specificity 83%). Three criteria could be combined in a risk of malignancy index (RMI) which is simply calculated using the product of the serum CA 125 level (U/ml), the ultrasound scan result (expressed as a score of 0, 1 or 3) and the menopausal status (1 if premenopausal and 3 if postmenopausal). This index was statistically virtually as effective a discriminant between cancer and benign lesions as more formal methods. Using an RMI cut-off level of 200, the sensitivity was 85% and the specificity was 97%. Patients with an RMI score of greater than 200 had, on average, 42 times the background risk of cancer and those with a lower value 0.15 times the background risk.

90346539

Haemostatic changes during continuous oestradiol-progestogen treatment of postmenopausal women

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To identify changes in haemostatic balance during continuous oestradiol-progestogen treatment, 60 postmenopausal women with climacteric complaints, mean age 55.4 years (range 44-68) were randomly allocated to receive one of four hormone replacement regimens for one year. All four formulations were administered daily and continuously, each contained 2 mg of 17 β-oestradiol in combination with either norethisterone acetate, 1 mg (group A) or 0.5 mg (group B) or megestrol acetate, 5 mg (group C) or 2.5 mg (group D). No significant changes occurred during treatment within or between the groups in platelet count, fibrinogen and 2-antiplasmin. Activated partial thromboplastin time was shortened (P < 0.05) in group D and a decline in factor VII activity and antigen (P < 0.001) and in ATIII activity (P < 0.05) was noted in group A. Protein C tended to decline in all treatment groups but statistically significant changes were noted only in groups A and C. Two women developed crural thrombosis during the observation period.

90347469

A controlled trial of the effect of calcium supplementation on bone density in postmenopausal women

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Background: The effectiveness of calcium in retarding bone loss in older postmenopausal women is unclear. Earlier work suggested that the women who were most likely to benefit from calcium supplementation were those with low calcium intakes. Methods: We undertook a double-blind, placebo-controlled, randomized trial to determine the effect of calcium on bone loss from the spine, femoral neck, and radius in 301 healthy postmenopausal women, half of whom had a calcium intake lower than 400 mg per day and half an intake of 400 to 650 mg per day. The women received placebo or either calcium carbonate or calcium citrate malate (500 mg of calcium per day) for two years. Results: In women who had undergone menopause five or fewer years earlier, bone loss from the spine was rapid and was not affected by sup-

plementation with calcium. Among the women who had been postmenopausal for six years or more and who were given placebo, bone loss was less rapid in the group with the higher dietary calcium intake. In those with the lower calcium intake, calcium citrate malate prevented bone loss during the two years of the study; its effect was significantly different from that of placebo (P < 0.05) at the femoral neck (mean change in bone density [± SE], 0.87 ± 1.01 percent vs. -2.11 ± 0.93 percent), radius (1.05 ± 0.75 percent vs. -2.33 ± 0.72 percent), and spine (-0.38 ± 0.82 percent vs. -2.85 ± 0.77 percent). Calcium carbonate maintained bone density at the femoral neck (mean change in bone density, 0.08 ± 0.98 percent) and radius (0.24 ± 0.70 percent) but not the spine (-2.54 ± 0.85 percent). Among the women who had been postmenopausal fox six years or more and who had the higher calcium intake, those in all three treatment groups maintained bone density at the hip and radius and lost bone from the spine. Conclusions: Healthy older postmenopausal women with a daily calcium intake of less than 400 mg can significantly reduce bone loss by increasing their calcium intake to 800 mg per day. At the dose we tested, supplementation with calcium citrate malate was more effective than supplementation with calcium carbonate.

90351880

Plasma fibrinogen and coronary risk factors: The Scottish Heart Health Study

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Plasma fibrinogen was measured in a sample of 8824 men and women aged 40-59 years participating in the Scottish Heart Health Study, and related to cardiovascular risk factors. Women had higher fibrinogen levels than men. In both sexes, multivariate analysis showed that fibrinogen was positively associated with age, smoking, total cholesterol and body mass index and negatively associated with alcohol consumption. Among women, early menopause and systolic blood pressure were also associated with fibrinogen levels. Univariate analyses showed weak positive associations with fish consumption for both sexes although only male white fish consumption entered the final model. Women with a history of contraceptive pill usage had significantly lower fibrinogen levels. The relationship between fibrinogen and physical activity was complex, and could largely be explained by smoking. These findings support the hypothesis that raised fibrinogen is one mechanism by which several major risk factors may promote coronary heart disease. However, known risk factors explained, at most, 10% of the total variance in fibrinogen levels among the general population.

90352100

Cost effectiveness of screening perimenopausal white women for osteoporosis: Bone densitometry and hormone replacement therapy

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Bone mass measurement at menopause to identify and selectively prescribe hormone replacement therapy for women at high risk for fractures has seen limited clinical use. We used epidemiologic, clinical, and economic data in a decision-analytic model to compare the following clinical strategies for perimenopausal, asymptomatic, white women with intact uteri: no intervention; bone mineral density measurement followed by selective, long-term (15-year) estrogen-progestin therapy in women with low bone mass; and unselective, universal hormone replacement therapy. Life expectancy and direct medical cost per patient were estimated for each strategy. Strategies for screening and treating women with perimenopausal bone mineral density < 0.9 g/cm^2 or < 1.0 g/cm^2 would cost $11 700 or $22 100, respectively, per year of additional life gained. If the cost of screening is less than $84, then resource savings from hip fractures prevented would be more than the cost of screening and treatment. Universal treatment without screening would prevent additional fatal fractures but would expose many more women to the adverse effects of hormone replacement therapy and would cost an additional $349 000 per year of life gained compared with the screening strategies. When quality of life was considered, screening was found to be cost effective over a wide range