of the menstrual flow, the amount of testosterone produced by the aging male does in fact decrease. Recent studies, such as the Massachusetts Male Aging Study show that, between the ages of 40 to 70 years, the mean testosterone level decreases annually by about 1%. Chronic diseases and the use of drugs have a comparable effect. Although it is generally believed that sexual impotence is a major symptom of male menopause, recent investigations have shown that sexual functionability may be preserved into the ninth and tenth decade of life. Sexuality is not merely an instinct or a psychological expression, but is deeply anchored within the personality. Even when, with increasing age, the frequency of sexual dysfunction increases, such changes do not correlate with the decrease in testosterone levels. None of these phenomena take place within an age span that marks them off from the involution processes in other organs. The expression midlife crisis commonly met with in the English literature points up the psycho-social implications. Impotence or a loss of sexuality is not a sequel of aging, but of attitude towards sexuality. The latter is preserved if it is not neglected throughout the course of a lifetime.

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Investigation of local and systemic effects of topical estrogen therapy in menopausal period

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Objective: Local and systemic estrogen preparations are successfully used during menopausal period and side effects are less with local applications. The aim of this study is to investigate systemic and local effects of topical estriol therapy in menopause. Study design: Fifty eight cases between age 38 and 65 in menopausal period with local and systemic complaints due to estrogen deficiency were investigated in our study. Before treatment, blood lipids, FSH, LH, estriol, maturation of vaginal epithelium, subjective menopausal complaints, weight and arterial blood pressure, were taken. 1 mg estriol was applied intravaginally for three weeks. All of the cases were reevaluated for the same parameters after the treatment. Results: It was observed that after the treatment serum FSH, LH levels decreased and estriol levels increased. These differences were statistically significant ($p < 0.001$). The maturation index and spinnbarkeit also improved significantly ($p < 0.05$). The level of serum HDL-cholesterol and triglyceride increased. LDL-cholesterol decreased ($p < 0.001$). Changes in VLDL and triglyceride levels were not statistically significant ($p > 0.05$), the weight and the arterial blood pressure were not changed. There were not noted any side effects after the treatment. Conclusions: Intravaginal application of estriol in the treatment of atrophic vaginitis is as effective as in providing an increase of HDL-cholesterol and triglyceride levels.

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Osteoporosis in men

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Osteoporosis has been a disorder almost synonymously associated with women, and as a result the understanding of osteoporosis in men is rudimentary. Nevertheless, there is an emerging recognition of the impact of osteoporosis in men, and the recent tremendous increase in knowledge of the disorder in women should provide a foundation for rapid advances in parallel areas in men. Attention should be focused on elucidating the causation of age-related bone loss and the clinical character and pathophysiology of idiopathic male osteoporosis. Of particular importance are efforts to understand the basic nature of sexual differences in skeletal development and maturation, with the aim of identifying aspects of male skeletal metabolism that require gender-specific clinical consideration. In addition, by understanding the mechanisms underlying the relative fracture prevention afforded the male skeleton, new therapy for both sexes may become possible. Even in advance of the understanding of these basic processes, appropriate clinical paradigms for the evaluation of osteoporosis in men should be developed and validated, and clinical trials of promising approaches to the prevention and treatment of osteoporosis in men need to be undertaken. These should certainly include evaluations of exercise, calcium supplementation, androgen supplementation, and formation and antiresorptive therapies. As newer therapeutic approaches are developed in the future, clinical studies should include male cohorts from their inception.

95067866

Testosterone relaxes rabbit coronary arteries and aorta

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Background: Until menopause, women appear to be protected from coronary heart disease. Evidence suggests that estrogen may play a role in the protection of the cardiovascular system by exerting a beneficial effect on risk factors such as cholesterol metabolism and by a direct effect on the coronary arteries. To date there has been no evidence linking testosterone with the occurrence of coronary heart disease. Testosterone may affect the cardiovascular system directly, thus partially explaining the difference in the incidence of coronary artery disease in men and premenopausal women. The purpose of this study was to assess the direct effect of testosterone and a number of testosterone analogues on rabbit coronary arteries and aorta in vitro. Methods and Results: Rings of coronary artery and aorta of adult male or nonpregnant female New Zealand White rabbits were suspended in organ baths containing Krebs solution; isometric tension then was measured. The response to testosterone was investigated in prostaglandin F(2) (PGF(2))- and KCl-contracted rings. The effects of endothelium and nitric oxide synthase, prostaglandin synthetase, and guanylate cyclase inhibition on testosterone-induced relaxation were investigated. The effects of ATP-sensitive potassium channels and potassium conductance were also assessed. Relaxing