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due to a decline in the polyamine content.

SEX STEROIDS IN AGEING MALE

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Objective: to establish the relationship between ageing and plasma sex hormones levels in males.
Methods: we measured plasma total testosterone and estradiol by radio-immunoassay in 41 healthy males aged 60-101 years as compared with 113 control females aged 50-103 years. All subjects were self-sufficient and not affected by any serious systemic or psychiatric disorder; they did not take any drug affecting plasma sex hormones concentrations.
Background: ageing is accompanied by a progressive decline of Leydig cell function in healthy men, resulting in a decrease of serum testosterone, whereas relatively little is known about the changes that occur in serum estradiol levels with advancing age.
Results: in accordance with previous observations, we confirmed that testosterone is inversely related to age, showing a significant decrease in plasma concentrations with advancing age ($r = -0,36$; $r^2 = 0,136$; $p = 0,01$). Estradiol showed an inverse correlation with age ($r = -0,277$; $r^2 = 0,077$; $p = 0,04$). In males aged 60-79 years (25 subjects) testosterone levels (522,4$\pm$94,5 ng/dL) did not significantly differ from that of males aged $\geq$ 80 years (16 subjects) (425,2$\pm$131,1 ng/dL). Estradiol showed no difference between males aged 60-79 years (49,8$\pm$13 pg/mL) and males aged $\geq$ 80 years (38,3 $\pm$ 19,2 pg/mL).
Conclusions: the data obtained by this study confirm the present literature about the values of total testosterone in older males.
Furthermore, the study adds some data about plasma estradiol levels: both ageing men and centenarians show significantly higher plasma estradiol concentrations than the control group females (45,3$\pm$16,5 pg/mL vs 18,8$\pm$6,9 pg/mL respectively).

AROMATASE OVEREXPRESSION ENHANCES THE STIMULATORY EFFECTS OF ANDROGENS ON MCF7 BREAST CANCER CELLS

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In women after menopause aromatization of adrenal androgens represents the main source of estrogens, which may promote the development of hormone-dependent breast tumor. Several studies have attempted to determine the cell type within carcinomas that is responsible for "in situ" estrogen biosynthesis and whether the amount produced may sustain relevant biological effects.
In this work we show P450arom mRNA and protein expression together with immunocytochemical localization of aromatase in the epithelial MCF7 breast cancer cell line. Moreover, we demonstrate that the enhanced aromatization of dehydroepiandrosterone in aromatase transfected MCF7 cells