Dehydroepiandrosterone: a springboard hormone for female sexuality.

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Abstract

OBJECTIVE:

To determine the role of adrenal androgenic hormone precursors in female sexual function.

DESIGN:

A review of current literature on sexual function and the androgen precursor hormone dehydroepiandrosterone (DHEA) and dehydroepiandrosterone sulfate (DHEAS).

RESULT(S):

The C(19) steroid DHEA is both an ovarian and adrenal androgen precursor hormone, whereas DHEAS is only synthesized in the adrenal cortex. Dehydroepiandrosterone sulfate secretion begins at age 10, peaks at age 20, and then wanes. Low DHEAS levels occur in men and women with adrenal insufficiency and in the elderly. Dehydroepiandrosterone, 50 mg/d, increases DHEAS levels. In women but not men, the increased DHEAS levels facilitate additional production of downstream androgens, testosterone, dihydrotestosterone, androstenedione, and androstenediol glucuronide. With the improved female androgenic profile women with adrenal insufficiency have increased sexual thoughts and fantasies as well as an enhancement in mood and well-being. In the elderly >age 65 - DHEAS levels increase in both men and women with DHEA 50 mg/d but only in women were the higher DHEAS levels accompanied by a surge in testosterone levels and in women >age 70 increased libido and enhanced sexual satisfaction as well as a 26% diminution in bone resorption, and a 10% decrease in skin pigmentation.

CONCLUSION(S):

The female adrenal androgen deficiency syndrome, characterized low serum DHEAS levels may be corrected by DHEA supplements that increase levels of DHEAS and downstream androgens of importance to female sexuality. PMID:12007898