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## **Hormone DHEA shows promise in helping women through menopause and towards a better sex life**

A new study has shown that the DHEA, a hormone mostly secreted by the adrenal glands, may be able to help a woman's menopausal symptoms, as well as giving her a better sex life. This is the first controlled evidence that low doses of DHEA can help sexual function as well as menopausal symptoms, and indicates a need for larger trials to confirm the benefits of DHEA in women after the menopause. The results appear in the December edition of the peer-reviewed journal *Climacteric*.

The researchers, from the University of Pisa, followed a group of 48 postmenopausal women with troubling symptoms for a period of a year. 12 of the women did not wish to take any form of hormone replacement, so they were given vitamin D and calcium (to help prevent osteoporosis). The remaining 36 women were randomly split into groups as follows:

- 12 women took a low dose of the hormone DHEA (dehydroepiandrosterone)
- 12 women were given a standard Hormone Replacement Therapy (oestrogen plus progesterone)
- 12 women were given the synthetic steroid, tibolone

Throughout the trial, the women's menopausal symptoms were measured using a standard questionnaire, the Greene Climacteric Scale.

The women's sexual interest and activity were also measured using a standard questionnaire, the McCoy Female Sexuality Questionnaire (MFSQ). This combines a number of factors, such as sexual interest, satisfaction with frequency of sexual activity, vaginal lubrication, orgasm, and sexual partner. The MFSQ was designed to measure aspects of female sexuality likely to be affected by changing sex hormone levels. Hormone levels were also measured throughout the trial.

After 12 months, all women receiving the hormone replacements showed improvements in climacteric (menopausal) symptoms, whereas those taking vitamin D and Calcium did not show any significant improvement.

At the start of the trial, all groups had similar sexual activity. After a year of use, women taking calcium and vitamin D showed a McCoy score of 34.9, whereas women taking DHEA showed a McCoy score of 48.6, indicating that women taking DHEA had a statistically significant elevation in sexual interest and activity. The results for the HRT group were similar, and both the HRT group and the DHEA group showed a higher level of sexual intercourse in comparison to the control group. Activity was also higher with tibolone, but this was not statistically significant.

Study leader, Professor Andrea Genazzani said:

*"This is the first time that a controlled trial has shown that low doses of the hormone DHEA may be able to help women deal better with menopausal symptoms, as well as helping their sex life. The work shows that DHEA has potential, especially for those women who may have problems in taking more conventional HRT. But this is a*

small study, a proof of concept. What we need to do now is to look at a larger study, to confirm that these initial results are valid”.

Commenting, Dr Anna Fenton (co-editor of the journal *Climacteric*) said:

“This is an interesting result, although we must bear in mind that this is a pilot study with a small sample. Nevertheless, it does indicate that DHEA has potential as a therapy to help women deal with the physical discomfort of the menopause, as well as helping them sexually. We can’t yet say that this study means that DHEA is a viable alternative to HRT, but what we can say is that we should be looking to do larger studies to confirm these initial results”.

ENDS

### **Notes for Editors**

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#### **Reference.**

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*Climacteric* is the official journal of the International Menopause Society.

**Please mention “Climacteric, the journal of the International Menopause Society” in any press story.**

#### **Additional notes**

- Tibolone is a synthetic steroid drug, used to alleviate menopausal symptoms. It should only be used under medical supervision.
- DHEA is a natural hormone (mostly made in the adrenal glands), with a variety of therapeutic uses. It should only be used under medical supervision.
- Hormone replacement therapy (HRT) should only be used under medical supervision.

#### **Abstract**

##### **Effect of 1-year, low-dose DHEA therapy on climacteric symptoms and female sexuality**

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**ABSTRACT** Background Sexual desire is affected by endocrine and psychosocial factors. Menopausal hormonal changes are relevant to the causes of sexual dysfunction during reproductive aging. Aim To evaluate the effects of different types of hormonal replacement therapy (HRT) on sexual function, frequency of sexual intercourse, and quality of relationship in early postmenopausal women. We recruited 48 healthy postmenopausal women aged 50-60 years (mean age 54.5 ± 3.3 years). Women with climacteric symptoms were uniformly randomized into three groups receiving either dehydroepiandrosterone (DHEA 10 mg) daily, or daily oral estradiol (1 mg) plus dihydrogesterone (5 mg), or daily oral tibolone (2.5 mg) for 12 months. Women who refused hormonal therapy were treated with oral vitamin D (400 IU). Efficacy was evaluated using the McCoy Female Sexuality Questionnaire before treatment and after 12 months. We evaluated the hormonal profile before treatment and after 3, 6 and 12 months. Results The groups receiving DHEA or HRT reported a significant improvement in sexual function compared to baseline ( $p < 0.001$  and  $p < 0.01$ , respectively) using the McCoy total score. The quality of relationship was similar at baseline and after 3, 6 and 12 months of treatment. There were significant increases in the numbers of episodes of sexual intercourse in the previous 4 weeks in women treated with DHEA, HRT and tibolone in comparison with the baseline value ( $p < 0.01$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively). No changes in the McCoy score occurred in women receiving vitamin D. Conclusions Daily oral DHEA therapy at the dose of 10 mg, HRT and tibolone all provided a significant improvement in comparison with vitamin D in sexual function and in frequency of sexual intercourse in early postmenopausal women.

### **Websites**

International Menopause Society, <http://www.imsociety.org/>  
Climacteric: [http://www.imsociety.org/about\\_the\\_journal.php](http://www.imsociety.org/about_the_journal.php)