

Dr Holtorf's comments on Progesterone

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The Bioidentical Hormone Debate: Are Bioidentical Hormones (Estradiol, Estriol, and Progesterone) Safer or More Efficacious than Commonly Used Synthetic Versions in Hormone Replacement Therapy?

Postgrad Med 2009;121(1):1-13. Holtorf K.

Both physiological and clinical data have indicated that progesterone is associated with a diminished risk for breast cancer, compared with the increased risk associated with synthetic progestins.

Progesterone: breast cancer protective

In order to investigate the nature of the association of involuntarily delayed first birth and risk of breast cancer, 1083 white women who had been evaluated and treated for infertility from 1945-1965 were followed prospectively through April 1978 to ascertain their breast cancer incidence. These women were categorized as to the cause of infertility into two groups, those with endogenous progesterone deficiency (PD) and those with nonhormonal causes (NH). Women in the PD group had 5.4 times the risk of premenopausal breast cancer compared to women in the NH group.... Women in the PD [progesterone deficiency] group had 5.4 times the risk of premenopausal breast cancer compared to women in the NH group. This excess risk could not be explained by differences between the two groups in ages at menarche or menopause, history of oral contraceptive use, history of benign breast disease or age at first birth

Breast cancer incidence in women with a history of progesterone deficiency.

Am J Epidemiol. 1981 Aug;114(2):209-17.

Cowan LD, Gordis L, Tonascia JA, Jones GS.

In order to investigate the nature of the association of involuntarily delayed first birth and risk of breast cancer... Women in the PD [progesterone deficiency] group had 5.4 times the risk of premenopausal breast cancer compared to women in the NH group [NH: women infertile from non-hormonal causes].

This excess risk could not be explained by differences between the two groups in ages at menarche or menopause, history of oral contraceptive use, history of benign breast disease or age at first birth

Progesterone: breast cancer promoter?

Abstract

Based on the results of a French cohort of postmenopausal women, it has been claimed that micronized progesterone does not enhance breast cancer risk. The impact of reproductive factors on breast cancer risk and a high prevalence of occult breast carcinomas at the time of menopause suggest an involvement of endogenous progesterone in the development of breast cancer. High mammographic density in the luteal phase and during treatment with estrogen/progestogen combinations reflect a change in the composition of mammary stroma and an increased water accumulation in the extracellular matrix which is caused by hygroscopic hyaluronan-proteoglycan aggregates. Proteoglycans are also involved in the regulation of proliferation, migration, and differentiation of epithelial cells and angiogenesis, and may influence malignant transformation of breast cells and progression of tumors. Reports on a lack of effect of estrogen/progesterone therapy on breast cancer risk may be rooted in a selective prescription to overweight women and/or to the very low progesterone serum levels after oral administration owing to a strong inactivation rate. The contradictory results concerning the proliferative effect of progesterone may be associated with a different local metabolism in normal compared to malignant breast tissue. Similar to other progestogens, hormone replacement therapy with progesterone seems to promote the development of breast cancer, provided that the progesterone serum levels have reached the threshold for endometrial protection.

Climacteric. 2013 Aug;16 Suppl 1:54-68. doi: 10.3109/13697137.2013.768806. Epub 2013 Feb 20.

Progesterone--promoter or inhibitor of breast cancer.

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The contradictory results concerning the proliferative effect of progesterone may be associated with a different local metabolism in normal compared to malignant breast tissue. Similar to other progestogens, hormone replacement therapy with progesterone seems to promote the development of breast cancer, provided that the progesterone serum levels have reached the threshold for endometrial protection.

Progesterone: breast cancer preventer or promoter?

Wouldn't it be convenient to stay with our
belief that progesterone protected
against breast cancer

Caution with robust levels of oral
progesterone that are commonly given

SHBG

The effect of progesterone administration on sex hormone binding globulin binding capacity in women with severe premenstrual syndrome.

Abstract

Thirty-one women with severe premenstrual syndrome had low sex hormone binding globulin (SHBG) binding capacities 30.2 ± 9.4 nmol DHT bound/l. The SHBG binding capacities rose when they were treated with three different doses of progesterone.

On 400 mg (17 women) SHBG level was 45.11 ± 11.80 .

On 800 mg (8 women) SHBG binding capacity rose to 64.75 ± 14.30 and on the six women who took 1200 mg progesterone daily SHBG binding capacity was 78.5 ± 23.10 . These results are discussed.

J Steroid Biochem. 1984 Jan;20(1):437-9.

Dalton ME.

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On 800 mg (8 women) SHBG: 64.75 ± 14.30

On 1200 mg (6 women) SHBG: 78.5 ± 23.10 .

Ah, welcome to the world of Sex
Hormone Binding Globulin SHBG