

REVIEW ARTICLE

Natural Progesterone: Current Approach for Women`s Health Problem

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ABSTRACT

Today's popular women's health literature is replete with suggestions for using natural hormones to prevent and treat a variety of health problems. Natural progesterone is often promoted as an alternative to synthetic progestins. A cultural move toward that which is "natural" and away from man-made chemicals is a current theme voiced by consumers of health care. Progesterone is the building block for many other major hormones. There is a direct correlation; i.e. 'cause' and 'effect', of female health problems as a consequence of estrogen dominance and HRT drugs. Natural progesterone appears to be an effective component of postmenopausal HRT and is preferable to standard progestational agents for women with worrisome lipid profiles or hypertension. Natural progesterone has fewer side effects than synthetic agents have, and it protects the uterus from estrogen-induced endometrial hyperplasia. Given the potential toxicities of exogenous estrogen, it is reasonable to speculate whether progesterone, together with a healthy lifestyle, could provide the cardio protective effects we want for our patients.

Key words: Natural progesterone, women's health, natural hormones, HRT drugs.

INTRODUCTION

Today's popular women's health literature is replete with suggestions for using natural hormones to prevent and treat a variety of health problems.^[1-6] Natural progesterone is often promoted as an alternative to synthetic progestins for two reasons:

- It appears to have fewer side effects in many women.^[7]
- It may have more benefit for lipid profile enhancement,^[8] osteoporosis prevention,^[9] and the treatment of menopausal symptoms,^[10] premenstrual syndrome (PMS),^[11,12] and endometriosis.^[13]

A cultural move toward that which is "natural" and away from man-made chemicals is a current theme voiced by consumers of health care. Primary care clinicians are confronted daily with questions from patients regarding alternative approaches to many women's health problems. Synthetic progesterone's are manufactured by drug companies and are close to the natural progesterone the body makes, but not identical. They can cause undesirable side effects. Natural progesterone is bio-identical to that molecule

manufactured by the human body and does not have these undesirable side effects.

THE ROLE OF PROGESTERONE

Progesterone is the building block for many other major hormones. Cortisol, DHEA, testosterone and estrogen are all made from progesterone in a process that begins with cholesterol. Only progesterone is readily converted into its sister hormones if needed. Importantly, if we are under a lot of stress and our adrenals are pumping out cortisol, our bodies will take any available progesterone and divert it to meet that demand. If too much progesterone gets diverted for cortisol, as happens when you suffer from adrenal fatigue, there is not enough to make the testosterone needed for a woman's sexual response let alone to oppose rising levels of estrogen. No wonder we feel sick, lethargic, and uninterested in sex when we're under stress.

BIOSYNTHESIS AND BIOCHEMISTRY:

Progesterone is manufactured in the corpus luteum of the human ovary through the conversion of pregnenolone to progesterone. The theca internal cells of the corpus luteum have all the enzymes necessary to convert cholesterol to

estradiol, whereas the granulosa cells which acquire a rich blood supply after ovulation and follicular rupture—convert pregnenolone to progesterone. Thus, a physiologic increase in progesterone occurs during the luteal phase of the menstrual cycle, probably stimulated by the luteinizing hormone (LH) surge at this time. It is thought that LH stimulates the uptake of acetate into the cholesterol molecule, which forms pregnenolone progesterone is also synthesized by the placenta, mainly by hydroxylation of the low-density lipoprotein fraction of cholesterol to pregnenolone, then to progesterone.^[14] It is also found in the adrenals and even the uterus in many mammals, including humans. A substantial portion of progesterone is stored in adipose tissue.^[15]

Plasma concentrations of progesterone in women vary with the menstrual cycle, with levels during the follicular phase being low, generally under 2 ng/mL. During the luteal phase, levels rise to 2 to 20 ng/mL in a surging pattern after ovulation. In the first trimester of pregnancy, blood levels are about 10 to 40 ng/mL, and they rise to 100 to 200 ng/mL near term. Progesterone levels also vary throughout the day; a decline in plasma levels of as much as 15% occurs 1 hour after a meal and in the early morning hours.^[16]

THERAPEUTIC USES OF NATURAL PROGESTERONE

Progestational agents are currently used in a variety of clinical settings:

- Contraceptive pills and devices.
- Treatment of dysfunctional uterine bleeding, endometriosis, and PMS.
- Management of threatened habitual abortion and certain types of infertility.
- Postpartum lactation suppression.
- Postmenopausal HRT.
- Treatment of hypoventilation (in selected situations).
- Management of some types of breast, endometrial, and renal carcinomas.

IMPORTANCE OF NATURAL PROGESTERON:

During the past 50 years estrogenic substances have permeated the foods we eat, the drugs we consume and environment in which we live. These unavoidable conditions have created serious out-of-balance, elevated levels of estrogens. The effect has been to lower progesterone levels - adversely affecting every organ in our body. The body needs natural progesterone to counter-balance the toxic effects of estrogen dominance.

In order to bring your system into balance it is often necessary to replenish and supplement your progesterone levels up to normal. When progesterone is in balance with estrogen it helps protect and prevent you from estrogen driven health problems.

The troubling effects of out-of-balance hormones are, Little doubt remains, estrogen dominance with the lack of natural progesterone in both men and women, is a major factor of Prostate ailments, Menopause problems, Excessive weight, PMS, Migraines, Heart disease, Strokes, Osteoporosis, Uterine and Breast fibroids, cysts, tumors and cancers.

There is a direct correlation; i.e. 'cause' and 'effect', of female health problems as a consequence of estrogen dominance and HRT drugs.

CONCLUSION

Natural progesterone appears to be an effective component of postmenopausal HRT and is preferable to standard progestational agents for women with worrisome lipid profiles or hypertension. Natural progesterone has fewer side effects than synthetic agents have, and it protects the uterus from estrogen-induced endometrial hyperplasia. Given the potential toxicities of exogenous estrogen, it is reasonable to speculate whether progesterone, together with a healthy lifestyle, could provide the cardio protective effects we want for our patients.

As for osteoporosis prevention and treatment, there are certainly some promising data regarding the beneficial effect of natural progesterone on bone formation, particularly in corticosteroid-induced osteoporosis. We need more research on its effects, but if results are positive, there may come a day when women take natural progesterone, follow a healthy diet, exercise and perhaps avoid exogenous estrogen entirely.

In PMS, the data are confusing. We need more information on the proper route of administration, dosage, and patient selection before we can determine the appropriate role of natural progesterone. More research is also necessary concerning the use of natural progesterone for affective disorders or allergic symptoms. Topical application of progesterone for benign breast disease appears promising, but again, there are insufficient data to clearly know its benefit. We need to know effective doses and routes of administration to manage a variety of women's health problems in this arena, as in many others related to "alternative" and "natural" medicine.

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