

PROGESTERONE FOR PROSTATE HEALTH

By James South, M.A.

For middle-aged and older men, especially those over age 50, prostate problems are an unpleasant fact of life. It is estimated that half of men in the 50-plus age group suffer from benign prostatic hyperplasia (BPH), an abnormal enlargement of the prostate gland.¹

This swelling of the prostate usually manifests as urinary problems: urinary frequency, urinary hesitation, reduced urinary flow, etc. The prostate gland is also the most common site for cancer to develop, with over 300,000 new cases in the U.S. in 1996.¹ The medical establishment places the blame for these prostate problems on the male hormones testosterone (T) and dihydrotestosterone (DHT), yet this belief generates an obvious paradox. The highest levels of T/DHT occur in young men, and T/DHT levels drop with aging. Yet prostate problems are almost non-existent in young men, while they increase with age, affecting 90 percent of all men by age 85, when T/DHT levels are extremely low.²

The Estrogen Connection

An important determinant of male hormonal health is the testosterone/estrogen balance (T/E). Healthy male physiology depends on a high T:E ratio. Although testosterone is the “male hormone,” men naturally produce small amounts of estrogen from testosterone.³ With aging, the T:E ratio drops, often dramatically. An enzyme called “aromatase,” especially prevalent in fat cells, converts testosterone to estrogen.⁴ Since most men lose muscle and gain fat as they age, aromatase activity increases, reducing testosterone even as it increases estrogen. Many scientists have commented on the importance of estrogen and the T:E ratio in promoting prostate problems. M. Krieg and colleagues note “...numerous experiments indicate that estrogens might also be involved in the abnormal growth of the human prostate.”⁵ “The data in this communication show a clear-cut, direct biochemical effect of estrogens on the human prostate and provide a cellular mechanism by which estrogens may affect prostatic physiology [negatively].”²

In a review on benign prostatic hyperplasia (BPH) and estrogen, W. Farnsworth reports that “...the induction of BPH is shown to be determined by the androgen [T+DHT]/estrogen ratio...”⁶ S. Boehm and coworkers conclude that “... estrogen suppression may be considered an efficient pharmacotherapeutic strategy in the medical treatment of uncomplicated benign prostatic hyperplasia.”⁷

Progesterone to the Rescue

Most people think of progesterone as a “female hormone.” Yet men normally produce progesterone as well, in both their adrenal and testicular tissue.⁸ Unfortunately, male progesterone levels drop with aging, just as do male testosterone levels.⁴ Severe, prolonged stress also depletes progesterone, since

the “state-of-siege” stress hormone cortisol is made from progesterone, as are testosterone, estrogen, aldosterone and other steroid hormones.⁸

And as researcher Ray Peat emphasizes, one of the most important roles for progesterone is to oppose the many toxic effects of excess estrogen.⁹ Progesterone expert Dr. John Lee noted multiple roles for progesterone in antagonizing estrogen and promoting prostate health.

Progesterone inhibits the conversion of testosterone to DHT.⁴ DHT is a weaker androgen than testosterone, and thus lowers the androgen/estrogen ratio in favor of estrogen. In addition, DHT is a far more potent stimulant of prostate cell growth than testosterone.⁴ Both testosterone and progesterone stimulate the activity of a protective gene called “p53.”⁴ The products of this gene activation are anti-cancer, and promote healthy apoptosis.¹⁰ Apoptosis is a “programmed cell suicide” that plays a key role in preventing cellular overgrowth (e.g., BPH) and cancer.¹⁰ Estrogen, on the other hand, activates a gene called “bcl2.”⁴ Bcl2 products inhibit healthy apoptosis.¹⁰

Progesterone may even help with prostate cancer. V. Petrow et al reported results of their study with rats and prostate cancer in 1984. “Growth of the Dunning R 3327-H prostatic adenocarcinoma, implanted in the rat, is inhibited by 6-methylene progesterone. This compound is a potent inhibitor of rat prostatic 5-alpha-reductase [as is progesterone; 5-alpha-reductase is the enzyme that converts testosterone to DHT] and in-vivo produced marked involution [shrinkage] of the prostate. Thus, this tumor requires dihydrotestosterone and not testosterone for growth.”¹¹ Andrews and colleagues also note: “Another steroid hormone that interacts with the androgen receptor in LNCaP [prostate cancer] cells (progesterone) also promotes apoptosis of these cells.”¹²

Progesterone for Men

Dr. John Lee has recommended a dose of approximately 4 to 6 mg once or twice daily for men in their late forties or older.^{4,13} Approximately 6 mg can be achieved with one-eighth level teaspoon of a cream containing 900 to 1,000 mg progesterone per 2 ounces. The cream should be rubbed onto thin skin areas such as inner forearm, chest, neck or scrotum morning and/or evening. Do not exceed the recommended dose.

Progesterone therapy is especially relevant for obese men; those with a family history of prostate cancer; those with proven low androgen/low progesterone/high estrogen levels. Progesterone may reduce fertility in men,¹⁴ and it is to be avoided by men with nonalcoholic liver cirrhosis.¹⁵

References

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