

HormoneSynergy®
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Hormone Pellets: FAQ

Introduction

Although bioidentical hormone pellets have been used since the late 1930s and are the oldest form of BHRT,ⁱ many physicians are unaware that they exist. This is, in part, due to lack of FDA-approval for pellets in women (Testopel® testosterone pellets are FDA approved for men). This is also due to the source of continuing medical education for physicians—doctors get much of their continuing education from drug companies, and the makers of FDA approved hormones have a huge profit incentive in teaching doctors about their products. Many patients find bioidentical hormone pellets the most effective form of BHRT in terms of symptom improvement and convenience.^{ii-v} Pellets only need to be inserted 2-3 times per year.

What are pellets?

Pellets are made up of either estradiol or testosterone. The hormones are pressed or fused into very small solid cylinders. Pellets are larger than a grain of rice and smaller than a Tic Tac®. In the US, the majority of pellets are made by compounding pharmacists and delivered in sterile glass vials. The pharmaceutical Testopel® is also available for men.

What are the advantages of pellets?

Pellets are implanted in fat tissue providing very consistent, stable levels of hormones; in other words, pellets avoid the fluctuations, or ups and downs, seen with other methods of hormone delivery. As mentioned above, studies have shown that many patients prefer pellets in terms of symptom improvement and convenience.

Estradiol and/or testosterone pellets are a very effective delivery system to maintain and reverse bone loss; in several studies, pellets have even been shown to be superior to other forms of HRT regarding bone health.^{vi-xx} Estradiol and testosterone pellets can lower LDL (bad) and raise HDL (good) cholesterol levels, and protect the heart by enhancing the health of blood vessels.^{xxi-xxiii}

In women, estradiol pellets have been shown to help with migraines and menstrual headaches.^{xxiv} Overall, estradiol and testosterone pellets can alleviate menopausal symptoms including hot flashes, heart palpitations, and insomnia. Sexual problems such as loss of libido and painful intercourse may be successfully treated with pellets. Lastly, pellets have been shown to reverse fatigue, depression, irritability, poor memory, and decreased concentration in women.^{xxv-xxxi}

What are the risks regarding breast cancer and pellets?

Studies regarding pellets and breast cancer risk in women have been favorable. One 18-year study of 261 women in the Netherlands showed that estradiol pellets did not increase breast cancer risk.^{xxxii} In another Australian study that looked at testosterone pellets along with usual hormone replacement, testosterone negated the increased risk of breast cancer from HRT

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(meaning the women who received testosterone pellets had a lower than expected risk for breast cancer).^{xxxiii} Two studies of breast cancer survivors noted no increased risk of cancer recurrence or death with estradiol pellets, testosterone pellets, or both.^{xxxiv,xxxv} Although these studies were favorable, they involved small numbers of women; therefore, it cannot be concluded that hormone pellets have absolutely no increased risk of breast cancer.

How and where are pellets inserted?

Pellets are inserted in the upper buttocks/hip area under local anesthesia (which means a lidocaine injection is used to numb the area). This is a relatively painless, simple procedure that takes a few minutes. The small incision is usually taped close, although occasionally a single stitch may be used. The experience of the health care professional matters a great deal, not only in placing the pellets, but also in determining the correct dosage of hormones to be used, as well as in treating other issues underlying hormone imbalance.

How long until a patient feels better after pellets are inserted?

Some patients begin to feel better within 24-48 hours while others may take a few weeks to notice a difference. Following all *8 Steps to Achieving Hormone Synergy* will provide the best results.

How long do pellets last?

Pellets usually last between 3 and 5 months in women and 4-6 months in men. Pellets do not need to be removed since they completely dissolve on their own.

Are there any side effects or complications from the insertion of pellets?

Complications from the insertion of pellets include minor bleeding or bruising, infection, and the possible extrusion of the pellet. Other than bruising, complications are rare. The risk for complications is reduced by following the post-op instructions. After pellet insertion, it's best to avoid vigorous physical activity for 48 hours. Early physical activity is a cause of extrusion, which is a pellet working its way out. Antibiotics may be prescribed if a patient is diabetic or has had a joint replaced. However, antibiotics are rarely needed.

Testosterone may cause an increase in facial hair or acne in some women, especially at higher dosages. Testosterone stimulates the bone marrow and increases the production of red blood cells. All methods of testosterone supplementation can cause an elevation in red blood cell production. If the hemoglobin and hematocrit (blood count) get too high, a unit of blood may be donated.

In women receiving estradiol pellets, there may be mild, temporary breast tenderness which resolves on its own or by taking indol-3-carbinol (cruciferous vegetable extract). There may also be a temporary water weight gain, which will resolve on its own. Estradiol (not testosterone) pellets are more likely to cause vaginal bleeding in a woman who still has her uterus when

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compared to other forms of estrogen replacement. This may be dose related (in other words, higher dosages are more likely to cause the uterine lining to build up, leading to bleeding).

Why haven't I heard about pellets?

Pellets are not patented and have not been marketed in the US. They are frequently used in Europe and Australia where pharmaceutical companies produce pellets. Most of the research on pellets is from Europe and Australia. Pellets were frequently used in the US from about 1940 through the late 70's when oral patented estrogens were marketed to the public. In fact, some of the most exciting data on hormone implants in breast cancer patients is out of the US. There are clinics in the US that specialize in the use of pellets for hormone therapy.

What if my primary care physician or my gynecologist says that there is no research to support the use of pellet implants?

He or she is wrong. There is a difference between "no research" and not knowing about or having read the research. It is much easier for busy practitioners to dismiss the patient, than it is to question their beliefs and look for research. To review data regarding effectiveness and long-term safety of hormone pellets, please see the "Subcutaneous Hormone Pellet Research for Women & Men" tabs at www.hormonesynergy.com/resources.aspx

How much does it cost to receive pellets?

The cost for the insertion of pellets is \$195 for women (\$205 for men). For women, pellets cost \$32 each (most women need 1 or 2 pellets). For men, testosterone pellet cost depends on dosage and number of pellets needed (men typically need 8-10 pellets if using 100-mg pellets, and 5-8 pellets if using 200-mg pellets. 100-mg pellets cost \$32 each; 200-mg pellets cost \$42 each). Pellets need to be inserted 2 to 3 times a year depending on how rapidly a patient metabolizes hormones. When compared to the cost of drugs to treat the individual symptoms of hormone decline, as well as the monthly costs of bioidentical hormone replacement, pellets are very cost effective. Pellets have been shown to be more effective at reversing bone loss than any pharmaceutical drug on the market. It is beyond the scope of this handout to examine the cost of drugs used for insomnia, depression, sexual dysfunction, obesity, diabetes, hypertension and more.

Will insurance cover the procedure?

Dr. Retzler's office does not bill insurance companies directly; however, you can get a health insurance claim form to send for reimbursement. Few insurance companies cover pellets for women (they do often cover pellets for men).

Do men need hormone therapy?

Testosterone levels decline in men beginning in their early 30's. Some men maintain adequate levels of testosterone into their mid 40's to mid 50's; some, even into their late 70's or 80's. Men

should be tested when they begin to show signs of testosterone deficiency. Even men in their 30's can be testosterone deficient and show signs of bone loss, fatigue, depression, erectile dysfunction, difficulty sleeping and mental decline. Most men should be screened by age 50. It is never too late to benefit from testosterone supplementation.

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