

MALE HORMONE REPLACEMENT

Testosterone may be taken orally, applied to the skin or injected. Oral hormones are largely broken down in the liver and also have unacceptable risks of liver problems so I do not use oral testosterone. There are two prescription testosterone gels and also a prescription testosterone patch available. All are very expensive (\$150/mth) and of relatively low potency (1% testosterone).

There is an injectable long-acting testosterone available (Depo-Testosterone®). This can provide higher levels of testosterone and is injected every week or two weeks in the hip muscle. It produces a peak of testosterone in 2 to 3 days and then drops off. So your level will fluctuate somewhat. The main advantage is its low cost, about \$100 for up to 4 months use.

I can also prescribe a compounded testosterone cream in any strength but usually 10%. This can be applied to your skin daily in the mornings. Skin absorption of testosterone varies from very low on the palms of your hand to very high on your scrotal skin. If the forearm has an absorption of 1, the hand has an absorption of 0.3x, the jaw 13x, the thigh 4-5x and the scrotal skin 40x. The most economical way to use testosterone is by applying cream to your scrotum daily. The prescription gels cannot be applied to your scrotum, as their alcohol content will be extremely irritating.

I strongly recommend you wash your hands thoroughly after using the topical gels or creams. It is possibly although uncommon, that you can transmit that unabsorbed testosterone to another person who may not need it, such as your spouse or a child.

Side effects of too much testosterone include becoming "testy" or easily angered, increase in breast tissue with tenderness or sensitivity of the nipples. This occurs if you are converting too much of the testosterone to estrogen via your fat cells or liver. This can be measured and then treated to block the conversion.

Testosterone can also be converted to di-hydro-testosterone or DHT. DHT is a potent form of testosterone and felt to enhance libido. But make too much and you can notice hair loss and possibly prostate enlargement. Saw palmetto blocks conversion of testosterone to DHT.

Over time testosterone replacement can increase your red blood cell count and if this goes high enough your blood will thicken and may cause symptoms.

I recommend checking your PSA 6 months after you begin testosterone therapy and then yearly. I also recommend a yearly check on your Hgb or hemoglobin level to ensure you are not getting an elevated blood count.