

Approaching Male Fertility and Testosterone Optimization

The anti-aging industry is booming. Women and men alike seek treatments to optimize the aging process and maintain their youthful energy and glow. For many, this includes individualized bioidentical hormone replacement therapy (BHRT) programs. With the average age of first time parents increasing and the anti-aging industry booming, conception support and hormone optimization plans may overlap more frequently than in years past. When we consider optimizing female hormones, progesterone is often one of the first addressed and, when dosed appropriately, is beneficial to conception goals and pregnancy maintenance. When we consider optimizing male hormone levels, while not the only hormone to address, testosterone is typically the first to come to mind. Endogenous testosterone is required for spermatogenesis, however exogenous testosterone can suppress intratesticular testosterone production, which may lead to azoospermia or severe oligozoospermia and thus, infertility. Additionally, elevated estrogen levels in men may be linked to low sperm fertility, potency and viability. What does this mean to the practitioner offering BHRT? Just as a woman's conception goals are taken into account when optimizing hormone levels and developing her individualized BHRT plan, a man's conception goals must be taken into account when developing his individualized BHRT plan.

According to recent research, male hypogonadism caused by intrinsic pathology of the hypothalamic-pituitary-testicular axis (HPT axis), as opposed to late onset hypogonadism due to functional suppression of the HPT axis from age-related comorbidities, is an under-diagnosed condition - and one not to be missed. After a thorough diagnostic workup, this condition is typically treated with testosterone replacement therapy; however, when fertility is desired this approach may be contraindicated. What is the best approach in these situations? The answer will be dependent on the individual but may include:

- Life style measures including strength training and a whole foods diet with decreased consumption of alcohol and decreased use of recreational drugs and nicotine
- Weight management
- Use of aromatase inhibitors such as chrysin, luteolin, resveratrol and/or zinc to decrease aromatase activity and conversion of testosterone to estradiol – simultaneously affecting two potential negatives in male fertility
- Use of 5-alpha-reductase inhibitors such as progesterone and/or saw palmetto to decrease 5-alpha reductase activity and conversion of testosterone to DHT
- Supplementation with stinging nettle root to assist in modulation of sex hormone binding globulin to increase free testosterone levels

While a man's approach to preparing for becoming a father may include maximizing healthy hormone output, his treatment plan should account for his conception goals.

References

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