

| <u>MEDICAL CONDITION</u> | <u>SUGGESTED SOLUTIONS</u> | <u>DISEASE MANAGEMENT/ SCREENING GUIDELINES IN THE UNITED STATES</u> | <u>STATISTICS / RISK REDUCTION</u> |
|---|--|--|--|
| <p>TESTOSTERONE/PITUITARY HORMONE ABNORMALITY</p> | <p>Your testosterone level should be checked if you have required opioids for pain control, are above ideal body weight, have diabetes mellitus, have HIV related disease, hypertension, hyperlipidemia, or erectile dysfunction.</p> <p><i>Mulligan T, et al. Prevalence of hypogonadism in males aged at least 45 years: the HIM study. Int J Clin Pract. 2006;60:762-769</i> http://www.blackwellpublishing.com/jcp_enhanced/</p> <p><i>Dobs AS. Androgen therapy in AIDS wasting. Clin Endocrinol Metab. 1999;12:379-390</i> http://jcem.endojournals.org</p> <p><i>Grinspoon S. Androgen deficiency and HIV infection. Clin Infect Dis. 2005;41:1804-1805</i> http://www.journals.uchicago.edu/doi/full/10.1086/498320?cookieSet=1</p> <p><i>Bodie J, et al. J Urol. 2003; 169:2262-2264</i> http://www.jurology.com/article/S0022-5347(05)63579-3/abstract</p> <p><i>Daniell HW. Hypogonadism in men consuming sustained-action oral opioids. J Pain. 2002; 3:377-384.</i> http://www.jpain.org/article/S1526-5900(02)00032-9/abstract</p> <p>Your testosterone levels should also be checked if you have decreased libido, erectile dysfunction, low energy or fatigue, poor concentration or bad mood, decreased muscle mass or strength, and increased body fat.</p> <p><i>Bhasin S, et al Journal Clinical Endocrinology Metabolism 2006</i> http://jcem.endojournals.org/cgi/eletters/91/6/1995</p> | <p>Testosterone levels should be checked in individuals with a sellar mass, history of radiation therapy to the sellar region, or other disease states in that area, treatment with steroids, ketoconazole, and opioids. Additionally individuals with human immunodeficiency virus associated weight loss, end stage renal disease chronic obstructive lung disease, infertility, osteoporosis or low trauma fracture especially in a young male, and type 2 diabetes mellitus should have the testosterone levels checked.</p> <p>If low testosterone levels are detected in the above conditions, further investigation to determine the cause will be necessary.</p> <p>Appropriate testosterone replacement therapy using the gel preparations, or injections would be necessary.</p> <p>Urology follow up would be advisable especially if PSA levels increased to greater than 4 ng/cc per year, or a PSA concentration greater than 1.4ng/cc is detected within any 12 month period of treatment with testosterone replacement therapy or a PSA velocity of greater 0.4 ng/cc per year is detected over 2 years.</p> <p><i>National Guideline Clearinghouse</i> <i>Bhasin S, et al. J Clin Endocrinol Metab 2006 Jun;91(6):1995-2010</i> http://www.guidelines.gov/summary/summary.aspx?doc_id=9420&nbr=005041&string=Bhasin</p> | <p>Internationally, Testosterone deficiency would be expected to occur in at least 5% of men over age 50, if symptoms and biochemical evidence of low testosterone and free testosterone levels were considered.</p> <p><i>Time For International Action on Treating Testosterone Deficiency Syndrome. Malcolm Carruthers, The Aging Male, March 2009;12(1): 21-28</i> http://www.informaworld.com/smpp/content~content=a909936394~db=all~jumpType=rss</p> <p>According to The Hypogonadism in Males (HIM) study 13.8 million men in the United States >45 years of age had low testosterone levels i.e. <300 ng/dL.</p> <p><i>Mulligan T, et al. Prevalence of hypogonadism in males aged at least 45 years: the HIM study. Int J Clin Pract. 2006;60:762-769</i></p> |