The International Hormone Society

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References of Consensus 8 on Testosterone Therapy of Testosterone Deficiency in Women

I) Age-related decline of testosterone levels in women:

Senescence is associated with a reduction of the serum testosterone level in women


Testosterone derives in women for more than 90% from the much quicker declining serum DHEA


II) Testosterone treatment has beneficial actions in a wide variety of conditions in women:

1) Testosterone may improve psychic well-being in women

Lower quality of life and fatigue in women: the association with lower testosterone levels


Quality of life in women: the improvement with testosterone treatment


Vasomotor symptoms in women: the improvement with testosterone treatment


Depression in women: the association with lower testosterone levels


Depression in women: the improvement with testosterone treatment


Negative symptoms in women: the association with lower serum testosterone levels

8. Goyal RO, Sagar R, Ammini AC, Khurana ML, Alias AG. Negative correlation between negative symptoms of schizophrenia and testosterone levels Ann N Y Acad Sci. 2004 Dec;1032:291-4
Anxiety in women: the association with lower testosterone levels

9. Landen M, Baghaei F, Rosmond R, Holm G, Bjorntorp P, Eriksson E. Dyslipidemia and high waist-hip ratio in women with self-reported social anxiety. Psychoneuroendocrinology. 2004 Sep;29(8):1037-46 (Serum levels of total testosterone (1.6+/-0.8 vs. 2.2+/-1.1, P=0.013) and free thyroxin (14+/-2 vs. 16+/-4, P=0.04) were lower in subjects confirming social anxiety)

Anxiety in women: the improvement with testosterone treatment


Memory loss and Alzheimer's disease in women: the association with lower testosterone levels

12. Simpson E, Davis S. Why do the clinical sequelae of estrogen deficiency affect women more than men? J Clin Endocrinol Metab. 1998 Jun;83(6):2214

Memory in women: the improvement with testosterone treatment


Love in women: the association with higher testosterone in women


Loss of sexual drive, sexual gratification, intercourse frequency in women: the association with lower testosterone levels


Sexuality decline in women: the improvement with testosterone treatment


2) Testosterone may improve the physical appearance and body composition of women

Sarcopenia in women: the association with lower testosterone levels
34. Douchi T, Yoshimitsu N, Nagata Y. Relationships among serum testosterone levels, body fat and muscle mass distribution in women with polycystic ovary syndrome. Endocr J. 2001 Dec;48(6):685-9

Sarcopenia in women: the improvement with testosterone treatment

Lean body mass in women: the association with lower testosterone levels

Lean body mass in women: the improvement with testosterone treatment

3) Testosterone may attenuate or slow down age-related diseases in women

Atherosclerosis in women: the association with lower testosterone levels
Atherosclerosis in women: the improvement with testosterone treatment


Coronary artery disease in women: the association with lower testosterone levels


Coronary artery disease in female subjects: the improvement with testosterone treatment


Osteoporosis and osteopenia in women: the association with lower testosterone levels


Osteoporosis and osteopenia in women: the improvement with testosterone treatment


Height loss and hip fractures in women: the association with lower testosterone levels


Rheumatism in women: the association with lower testosterone levels


Rheumatism in women: the improvement with testosterone treatment


Obesity in women: the improvement with testosterone treatment


Cancer in women: the association with lower testosterone levels


Cancer: the improvement with testosterone treatment?


III) Diagnosis of testosterone deficiency in women

Clinical testosterone evaluation in women


Serum androgen tests in women


**Serum total testosterone in women**


**Serum free testosterone in women**


**Serum dihydrotestosterone and androstanediol glucuronide in women**


**Serum androsterone in women**


**24-hour urine testosterone tests in women**

**Urinary testosterone in women**


100. Tresguerres JA, Tamj J. Urinary and plasma testosterone glucosiduronate measurement by a simple RIA method. J Steroid Biochem. 1979 Jul;11(1A):143-6

**Urinary 17-ketosteroids in women**


**Urinary androsterone**


**IV) Treatment of Testosterone Deficiency in women**

**Testosterone medications for women**


**Transdermal testosterone for women**


Sublingual/buccal testosterone for women


Intramuscular injections of testosterone or nandrolone for women


Testosterone treatment in women: dose and frequency

Testosterone treatment in women: safety


Testosterone treatment in women: side effects


Testosterone treatment in women: interferences


139. Goh HH, Wong PC, Ratnam SS. Effects of sex steroids on the positive estrogen feedback mechanism in intact women and castrate men. J Clin Endocrinol Metab. 1985 Dec;61(6):1158-64


Testosterone treatment in women: follow-up

