

Andropause

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Andropause

- Men + Age = ↓ Testosterone Levels
- Andropause (Male Menopause)
 - Ages 50- 70

Testosterone Deficiency

- Loss of muscle mass
- Increasing Fat Mass
- Fatigue
- Loss of Libido
- Erectile Dysfunction
- Penile Shrinkage
- Gynecomastia
- Prostate Problems

May occur more frequently after vasectomy because of anti-sperm anti-bodies.

Vasectomy and Dementia

- May face higher risk of dementia, Primary Progressive Aphasia (loss of language skills).
- Of 47 men with PPA, 40% had vasectomy, compared with 16% of 57 men without PPA.

> *Cognitive & Behavioral Neurology*; 2006: 19(4):190-193

Vasectomy and Dementia

- PPA – nerve cells die in brain region responsible for language skills.
 - Difficulty with name recognition, speech, reading, writing, and comprehension.
- Caused by Sperm Antibodies?

Excess Estrogen

- Less Testosterone = Excess Estrogens
- Aromatase from fat cells
 - Excess body fat = excess female hormones
- Prostate tissue growth
 - BPH – Benign Prostatic Hypertrophy
 - Prostate Cancer

Hypogonadism

- Hypogonadism is present in 5% of males aged 40-50, but in up to 70% of males older than 70.

>*Journal of Gerontology* 2001; Series A56:M263-5.

Cognition

- Declining Testosterone levels predict physical frailty and declining cognitive function, while testosterone replacement can improve cognitive function in older men.

>*Journal of Cognitive Neuroscience* 12:407-414.

>*Behavior Neuroscience* 108:325-332.

Testosterone Replacement

- May protect against Alzheimer's dementia.

> *Journal of Clinical Epidemiology* 44:671-684.

> *Proctology National Academic Science USA* 200;
97:1202-1205.

Delay Andropause

- Support man's own production of testosterone
- Proper Nutrition and Exercise Fundamental

Testosterone Replacement

- If system fails to make enough
- Careful to start, inhibits own testosterone production. May need testosterone replacement indefinitely.

Options for Prevention

- Control Your Weight

- Decrease fat mass
- Increase Muscle Mass

- Reverse Insulin Resistance

> *Diabetologia* 1992;35:173-177.

> *Psychoneuroendocrinology* 1992;17(4):375-383).

Options for Prevention

- **Tribulus Terrestris (Puncture Vine)**
 - Boost LH production by up to 72%, testosterone by up to 41%.
 - Also boosts Libido and Sperm Production (Chemical Pharmaceutical Institute Literature).
 - 1500mg daily

Options for Prevention

- Block Aromatase
 - Arimidex 0.5 mg weekly
 - DIM (di-indole-methane), I3C (indole-3-carbanol) & ½ C broccoli sprouts daily
 - Improve Metabolism of Estrogens
 - *Journal of Nat. Cancer Institute* 1997;89:718-23.
 - Reduce Alcohol, Boost Zinc, Reverse Obesity.

Options for Prevention

- Block 5-alpha-reductase
 - Saw Palmetto - 160-320mg/ day
 - *Cur The Res* 1994; 55(7):776-85.
 - Pygeum Africanum - 30-100mg 2x day
 - 14% B-sitosterol or Phytosterols
 - *Lancet* 1995; 345:1529-32.
 - Stinging Nettles – 300mg 2-3x day
 - Progesterone - 5-10mg in topical cream, or 10-25 mg capsule orally at bedtime

Options for Treatment

- Lower Excess Estrogen
 - Weight Loss!
 - Ground Flax Seeds – 2-4 Tbsp daily
 - *Cancer Epidemiology Biomarkers Preview* 1998; 7(12:1101-8).
 - Calcium-D-Glucarate – 500 mg 1-2x daily
 - *Cancer Detection Prevention* 1997;21(2):178-90.

Options for Treatment

- Avoid Testosterone Injections, which use synthetic (methyl-testosterone).
- Natural Testosterone Options:
 - Androderm patch
 - Androgel – topical gel
 - Compounding Pharmacy – topical cream, 50-150mg daily
 - Always test levels and metabolites!

Options for Treatment

- **Trans-D Tropin**
 - Supports own release of growth hormone.
 - 6 wks, boost release of hGH by up to 1700% at one our post dose.
 - Works best with aggressive exercise program.