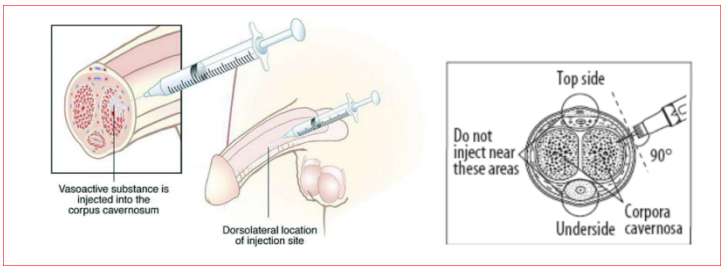
How to have sex in a canoe – oar maintenance

Fast facts

- Domains of male sexual dysfunction: Desire, Orgasm, Ejaculation, Erectile function, Anatomical
    - Orgasmic dysfunction: Delayed, Painful, Hypo, Anorasmia, PGAD
    - Ejaculatory Dysfunction: Premature, Delayed, Painful, Retrograde, Anejaculation
    - Erectile dysfunction: Arteriogenic, Anatomic, Neurogenic, Endocrine, Psychogenic
    - Anatomic dysfunction: Penile curvature (Congenital, Peyronie's), Penile fractures, self-inflicted
    - Desire: Low Testosterone, Psychological, Situational, Iatrogenic, Metabolic
- Erectile dysfunction is an early marker for cardiovascular disease and provides an opportunity for intervention and education with a patient symptom as a motivator to have proactive lifestyle and medication interventions
- Moderate and severe ED have 65% and 43% increased risk of CVD and stroke respectively
- Treatments for ED
    - Oral PDE5-Is: on demand full dose, double dosing, daily tadalafil, check Testosterone and correct
    - ICI: Customized mix (Prostaglandin E1, Papaveirne, Phentolamine) – several strengths. High reliability, very easy patient uptake
    - VED: Oldest therapy, reusable. Unpopular due to "hinge" effect, discolouration and pain
- Peyronie's disease
    - 3-9% of men, a smaller percentage have significant enough disease to hamper/prevent intromission
    - Limited role for oral therapies
    - Traction therapies require significant dedication, 30-60 minutes daily for 3mo+ for 10-15 degree correction. Main adjunct to other therapeutic options.
    - Intralesional approaches may be effective but have long time courses and require commitment
    - Surgical therapies can be effective but require a detailed consent due to consequences and side effects
- Low Testosterone – estimated at 5% of the male population age 30-70
    - Diagnosis requires symptoms and biochemical confirmation (2 AM Testosterone samples 2-4 wks apart drawn before 11 am)
    - Consequences of untreated low T: ED, obesity, osteoporosis, lower QoL, increased cardiovascular risk, increased mortality, metabolic syndrome, poor glycemic control
    - Sexual symptoms and fatigue won't improve before 3 mo, and should improve by 6 mo
    - Symptoms are vague – have a broad differential if the therapy isn't successful
    - S/E of Testosterone replacement: Sleep apnea, erythrocytosis, LUTS, acne, infertility
    - Fertility preserving and non-preserving options exist
    - Oral therapies are difficult to use and ultimately ineffective
    - Monitor with regular blood work (minimum CBC, LFTs, T)



Saint Louis University: Androgen Deficiency in Aging Males (ADAM) Questionnaire

Positive if answers to questions No.1 or No.7 or any three answers are "yes."

1. Do you have a decrease in sex drive?
2. Do you have a lack of energy?
3. Do you have a decrease in strength and/or endurance?
4. Have you lost height?
5. Have you noticed a decreased enjoyment of life?
6. Are you sad and/or grumpy?
7. Are your erections less strong?
8. Have you noticed a recent deterioration in your ability to play sports?
9. Are you falling asleep after dinner?
10. Has your work performance deteriorated recently?

Source: Morley JE, at al. *Metabolism.* 2000;49:1239-1242.

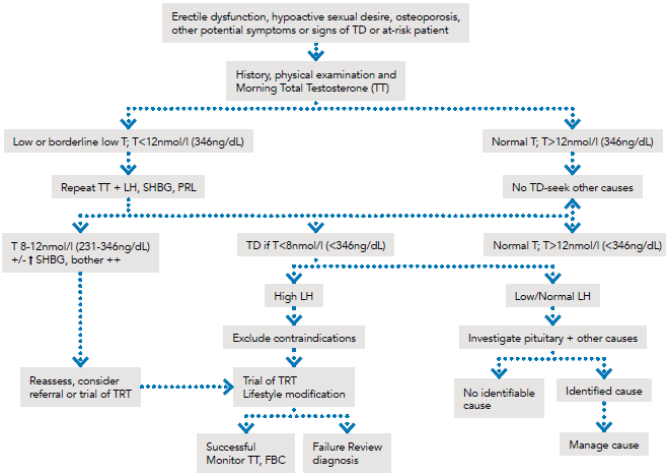


Table 7. Testosterone Products for the Treatment of TDS[5,90,434,435]

Compound	Starting or standard dose	Advantages	Disadvantages
Oral agents			
Testosterone undecanoate	120-240 mg TID	Oral convenience Modifiable dosage	Serum T levels and clinical responses vary Must be taken with fatty food
Intramuscular agents			
Testosterone enanthate	250 mg q2-3 weeks	Low cost Self injection for some men	Wide fluctuations in circulating T levels, occasionally symptomatic Multiple injections Pain and redness at injection site Relative higher risk of polycythemia
Testosterone cypionate	200 mg q2-3 weeks	Low cost Self injection for some men	Wide fluctuations in circulating T levels, occasionally symptomatic Multiple injections Pain and redness at injection site Relative higher risk of polycythemia
Testosterone propionate	100 mg q2 days	Low cost Self injection for some men	Wide fluctuations in circulating T levels, occasionally symptomatic Multiple injections Pain and redness at injection site Relative higher risk of polycythemia
Transdermal agents			
Testosterone patch	5 to 10 mg/day	Mimics T circadian rhythm Simple administration	Skin irritation, occasional allergic contact dermatitis Daily administration
Testosterone gel 1%	40 to 80 mg/day	T levels within normal range Flexible dose modifications Easy to apply Readily absorbed Skin irritation less common	Possible transfer during intimate contact Skin irritation at application site in a small number of men Daily administration
Testosterone solution 2% (for underarm application)	60 to 120 mg/day	T levels within normal range Skin irritation less common	Possible transfer during intimate contact Daily administration

The following products are not marketed in Canada:
Testosterone undecanoate injection in castor oil (long-acting IM injection)
Testosterone buccal system (mucoadhesive)
Testosterone pellets for subcutaneous administration (implantation)
Testosterone gel 1.62%, 2%

Contraindications to TRT

- CHF NYHA class III or IV*
- Hematocrit elevated and uninvestigated (>55%)
- Elevated PSA uninvestigated
- Abnormal DRE uninvestigated
- Prostate cancer**
- Breast cancer
- Sleep Apnea – untreated
- Severe LUTS

Source: Google Images

How to follow?

- 1 month
  - Expect no symptom improvement
  - CBC, LFTs, T, FSH, LH, E2, SHBG, PSA
- 3 month
  - May see sexual and psychological symptoms improve
  - CBC, LFTs, T, FSH, LH, E2, PSA
- 6 month
  - Should see major improvements in sexual and psychological symptoms (if not, consider other diagnoses)
  - May begin to see improvements in muscle mass, adiposity and body compisition
  - CBC, LFTs, T, Lipids, HgbA1c, FSH, LH, E2, PSA
- Continue q6 mo x 2 then q 1 yr if no issues
- Expect benefits in muscle mass by 12-18 mo
- Expect benefits in bone mineral density at 24-36 months

Follow

My ICI recipes

- Trimix (Prostaglandin E1, Papaverine 22.5 mg/mL, Phentolamine 0.83 mg/mL) – 5 mL bottle. Prostaglandin dose
  - Regular 8.3 mcg/mL
  - Plus 20 mcg/mL
  - Forte 40 mcg/mL
  - Ultra 60 mcg/mL
- Quad mix – any of the above recipes with Atropine 0.1 mg/mL
- Bimix (Papaverine/Phentolamine) – 5 mL bottle
  - Regular 27.1 mg/mL & 0.83 mg/mL
  - Light 13.05 mg/mL & 0.83mg/mL
  - Super 30 mg/mL & 2 mg/mL

ICI troubleshooting

- Penile pain/Throbbing
  - Usually due to alprostadil/prostaglandin dosing. Reduce or remove from the mixture
- Penile curvature at injection site
  - Patient not varying the location of injection. Avoid that location and should self resolve
- Priapism
  - Present to emergency department if persists for more than 4 hours. Often responds quickly to intracavernosal phenylephrine.
- Bleeding
  - Patient likely injured a superficial vessel. Visibly confirm no vessels before insertion of needle
- Urethral bleeding
  - Missed the cavernosal body and injected the urethra/spongiosum
- Unable to visualize penis for injection
  - Adiposity→practice with a mirror (this takes lots of practice but is doable) or partner injection
  - Visual defect/disability→partner injection or consider penile implant