

Use of Testosterone Replacement Therapy in Elderly Men on the Rise in Ontario

Despite research suggesting possible safety concerns of testosterone replacement therapy (TRT) when used in the elderly, its use in Ontario among elderly men has increased nearly 3-fold over the past 15 years.

What does this mean?

- TRT is a group of drugs indicated for confirmed low morning serum testosterone levels associated with symptomatic testicular disease (hypogonadism)
- Previous evidence by other researchers has shown potential cardiovascular safety concerns among men using TRT
- Despite this evidence, a large number of men (many who are at risk of cardiovascular complications) continue to be prescribed TRT

Recommendations

- ✓ TRT is only covered on the provincial public drug formulary for patients with documented symptomatic hypogonadism.
- ✓ If you have a family history of cardiovascular disease, or are being treated for other diseases, consult your physician before taking a TRT.

How do we know this?

The ODPRN conducted a time series analysis using linked health administrative records among men aged 66 years of age and older who received testosterone products reimbursed by the provincial drug plan in Ontario, Canada between January 1997 and March 2012. A total of 28,477 men were dispensed testosterone over the study period. Overall, testosterone prescribing increased more than 3-fold between 1997 (3.6 men per 1000 eligible) and 2012 (11.0 men per 1000 eligible). Although testosterone prescribing declined 27.9% in early 2006 following their change in listing from General Benefit to Limited Use ($p < 0.01$), the overall decrease was temporary and testosterone use exceeded pre-policy levels by the end of the study period (11.0 men per 1000 eligible). This was largely driven by prescriptions for topical testosterone, which rose 464% between the policy change in 2006 (1.0 men per 1000 eligible) and the end of the study period (4.8 men per 1000 eligible). Only 6.3% of men who initiated TRT had a previous diagnosis for hypogonadism

Piszczek J, Mamadani M, Antonior T, Juurlink DN, Gomes T. The impact of the drug reimbursement policy on rates of testosterone replacement therapy among older men. *PLoS ONE*. 2013;8(5):e64811. doi:10.1371/journal.pone.0064811

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