

Sexual dysfunction

INTERNATIONAL JOURNAL OF
IMPOTENCE RESEARCH

Losartan plus tadalafil improves erectile dysfunction in men with T2D

Readability	✓✓✓✓✓
Applicability to practice	✓✓✓✓✓
WOW! factor	✓✓✓✓✓

1 The pathogenesis of erectile dysfunction (ED) in men with diabetes has several factors, which include the neural, endocrine, vascular and metabolic systems.

2 The authors studied the effects of an angiotensin II receptor blocker, losartan, on men with T2D and ED, after finding that it improved ED in diabetic rats. This study was the first clinical trial to investigate the treatment of ED with losartan in men with diabetes.

3 The study comprised 124 men aged >18 years with ED and well-controlled T2D. They were randomised to receive once-daily losartan (5 mg; $n=31$) or tadalafil (50 mg; $n=32$), or losartan plus tadalafil ($n=31$), or acted as control subjects ($n=30$) over a 12-week period

4 The authors reported that, compared with controls, men given losartan or tadalafil, or losartan plus tadalafil achieved significantly better mean scores according to the International Index of Erectile Function questionnaire, as compared with baseline. Significant improvement was also noted in the percentage of successful penetrations and successful intercourse.

5 The authors found that combining losartan and tadalafil offered a more effective therapy than either on its own. They concluded that losartan appeared to be effective in men with T2D with ED, in particular for those with mild-to-moderate ED.

Chen Y, Cui S, Lin H (2012) Losartan improves erectile dysfunction in diabetic patients: a clinical trial. *Int J Impot Res* 30 Aug [Epub ahead of print]

Angiotensin II receptor blockers – ACE drugs for diabetic patients with erectile dysfunction?



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The choice of anti-hypertensive agents has long been the cause of a complex and drawn-out debate, particularly concerning the treatment of diabetes. A plethora of guidelines exist to

aid the clinician in selecting the most appropriate therapy to initiate, whilst taking into account metabolic effects and hard clinical outcome data. For a population-based approach these are helpful. It is imperative, however, to consider the individual's clinical characteristics. For example, a patient with angina may be given a beta blocker to lower blood pressure and provide additive cardiovascular protection. However, the use of a beta blocker for hypertension as first-line therapy is not supported at a population level. Moreover, beta blocker usage is one of the major causes, along with thiazide diuretics, of erectile dysfunction (ED).

The use of agents that restrict angiotensin II action (angiotensin-converting enzyme [ACE]

inhibitors or angiotensin II receptor blockers [ARBs]) remains popular in treating diabetes in people with hypertension or microalbuminuria/clinical nephropathy, given their proven impact upon improving clinical outcome. In the article by Chen et al (2012; summarised alongside), the

authors demonstrated that the benefits of ARBs (or at least losartan) extend to improving tumescence in men with ED. The premise for this study was that angiotensin II exists in higher amounts in penile smooth muscle and experimental inhibition of its action promoted smooth muscle relaxation. Intriguingly, losartan (as a single-use treatment) was effective in promoting improved sexual activity, even more so when combined with tadalafil. This

effect was more noticeable in men with mild-to-moderate ED — the most common level of ED experienced within this patient population.

Validation of these data with further studies could provide further credence for the extended use of this class of agents either as an anti-hypertensive treatment or as a therapeutic tool for ED in its own right.

“The authors demonstrated that the benefits of angiotensin II receptor blockers (or at least losartan) extend to improving tumescence in men with erectile dysfunction.”

CLINICAL
ENDOCRINOLOGY

Sharp fall in serum testosterone after oral glucose load

Readability	✓✓✓✓✓
Applicability to practice	✓✓✓✓✓
WOW! factor	✓✓✓✓✓

1 The aim of this study was to examine the physiological effect a glucose load had on serum testosterone levels in men ($n=74$, age 19–74 years) with differing glucose tolerance, and to explore the underlying mechanisms responsible.

2 Following an overnight fast, all men underwent a 2-hour oral glucose tolerance test using administration of 75 mg of glucose. Blood samples were taken at time=0, 30, 60, 90 and 120 minutes following glucose ingestion.

3 At all time points, testosterone levels were significantly lower than at baseline ($P<0.0001$), and this reduction was similar across the varying levels of glucose tolerance

4 The authors concluded that the fall in testosterone following an oral glucose load may be due to a direct testicular defect.

Caronia LM, Dwyer AA, Hayden D et al (2012) Abrupt decrease in serum testosterone levels after an oral glucose load in men: implications for screening for hypogonadism. *Clin Endocrinol (Oxf)* 17 Jul [Epub ahead of print]

“Men with impaired fasting glucose were more likely to have severe erectile dysfunction and a higher CV risk compared with men with normal glucose levels.”



Impaired fasting glucose increases risk of severe erectile dysfunction

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓✓

1 Impaired fasting glucose (IFG) is a state of non-diabetic hyperglycaemia, which can lead to the development of diabetes and cardiovascular (CV) diseases.

2 The aim of the study was to assess the effect of IFG (5.5–6.9 mmol/L) on sexual health in male participants. The authors also looked at the impact of IFG on morbidity and mortality.

3 Out of the 3451 participants with sexual dysfunction, 659 (19.1%) had IFG.

4 The authors found that men with IFG were more likely to have severe erectile dysfunction and a higher CV risk compared with men with normal glucose levels.

Corona G, Rastrelli G, Balercia G et al (2012) Hormonal association and sexual dysfunction in patients with impaired fasting glucose: a cross-sectional and longitudinal study. *J Sex Med* **9**: 1669–80



ED rates similar in South Asian and Caucasian men

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓

1 Sexual dysfunction is a common factor in diabetes, particularly in men from South Asia.

2 The authors aimed to investigate differences in the prevalence, and the intercorrelations of, erectile

dysfunction (ED), premature ejaculation (PE) and reduced libido among South Asian and Caucasian men ($n=184$, $n=326$), with and without diabetes.

3 There were no notable variations in the prevalence of ED in men with diabetes from both ethnic groups. Reduced libido was significantly associated with increasing severity of ED.

4 PE was significantly more common in South Asian men than in Caucasian men, whether they had diabetes or not (45.8% versus 22.4%, $P<0.001$).

Malavige LS, Wijesekera P, Seneviratne ED et al (2012) Ethnic differences in sexual dysfunction among diabetic and nondiabetic males: the Oxford Sexual Dysfunction Study. *J Sex Med* **27** Aug [Epub ahead of print]



Fatherhood: Effect on metabolic and CV outcomes

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓✓

1 Previous studies have reported a negative association between fatherhood and testosterone levels, this is probably because of a decrease in sensitivity of the hypothalamic-pituitary-gonadal axis. Fatherhood may also affect metabolic and cardiovascular (CV) outcomes.

2 The study authors explored the biological and clinical correlates of the number of children (NoC), and the possible associations with approaching CV events, in males with sexual dysfunction ($n=4045$).

3 Testosterone levels increased in a step-wise, NoC-dependent manner. NoC was associated with a higher forthcoming CV event incidence.

4 The authors concluded that the results support the hypothesis that fatherhood and bond maintenance contexts are linked with a reduction in sensitivity of the hypothalamic-pituitary-gonadal axis.

Fisher AD, Rastrelli G, Bandini E et al (2012) Metabolic and cardiovascular outcomes of fatherhood: results from a cohort study in subjects with sexual dysfunction. *J Sex Med* **15** Aug [Epub ahead of print]



Severe ED linked to overactive bladder syndrome in men with T2D

Readability	✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓✓

1 Overactive bladder (OAB) syndrome is defined as a urinary urgency, with or without incontinence, typically with urinary frequency and the need to get up in the night to urinate. Both (OAB) syndrome and erectile dysfunction (ED) are common risk factors in men with diabetes.

2 This authors of this study assessed the risk factors of OAB and the correlation between OAB and ED in men with T2D.

3 The study involved 453 men with T2D who were attending an outpatient diabetic clinic at Kaohsiung Chang Gung Memorial Hospital, Taiwan over a 6-month period in 2008. They answered self-administered questionnaires (Sexual Health Inventory for Men [SHIM] and the OAD Symptom Score [OADSS]) to assess for ED and OAB.

4 The authors found that men with ED or OAB tended to be older and have a lower SHIM score and lower testosterone levels, and had lived with diabetes for a longer period, compared with those without. They exhibited a higher prevalence of hypertension, neuropathy, stroke and albuminuria, and a higher systolic BP and a lower serum albumin level.

5 The authors concluded that there is an important link between severe ED and OAB, particularly OAB wet, also known as urinary incontinence. They reported that having OAB wet increased ED risk (odds ratio, 4.06, $P<0.013$) and severity.

Liu RT, Chung MS, Chuang YC et al (2012) The presence of overactive bladder wet increased the risk and severity of erectile dysfunction in men with type 2 diabetes. *J Sex Med* **9**: 1913–22