Men's Sexual Health Research Review™

Making Education Easy

Issue 20 – 2015

In this issue:

Abbreviations used in this issue:

ADT = androgen-deprivation therapy; **BPH** = benign prostatic hyperplasia; **CAD** = coronary artery disease; **ED** = erectile dysfunction; **IIEF** = International Index of Erectile Function; **IPSS** = International Prostate Symptom Score; **MI** = myocardial infarction; **PD** = Peyronie's disease; **PE** = premature ejaculation; **RCT** = randomised controlled trial.

Welcome to the twentieth issue of Men's Sexual Health Research Review.

This issue begins with research from the US exploring the relationships between borderline testosterone levels and depression/depressive symptoms, while other research from Israel suggests that male anteportal ejaculation and vaginal penetration difficulties are inter-related. The CONDUCT trial showed that the fixed-dose combination of dutasteride and tamsulosin along with lifestyle advice resulted in rapid, sustained improvements in men with moderate BPH symptoms at risk of progression. The final paper selected for this issue presents the ISSM (International Society for Sexual Medicine) Testosterone Deficiency Process of Care Committee's report on the diagnosis and management of testosterone deficiency in men.

I hope you find the research selected for this issue interesting. I enjoy your feedback, questions and suggestions, so please keep them coming.

Kind Regards,

Dr Michael Lowy

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High rates of depression and depressive symptoms among men referred for borderline testosterone levels

Authors: Westley CJ et al.

Summary: Rates of depression and depressive symptoms were assessed in 200 men with borderline testosterone levels (6.9–12 nmol/L) in this research. The rate of depression/depressive symptoms in the men was higher than typically seen in the general population (56% vs. 6–23%), and the rate of antidepressant use in the men was 25%. Notably, men with borderline testosterone levels had higher rates of overweight/obesity and physical inactivity, and their common symptoms were ED, decreased libido, fewer morning erections, low energy and sleep disturbances.

Comment: Men with a low testosterone level who have a diagnosis of hypogonadism may experience symptoms of depression. On the other hand, men with long-term depression may drop their testosterone level. The situation of a low testosterone level on either side of the equation is made worse if the man is overweight and has unhealthy lifestyle risk factors. In addition, men with depression may put on weight, further aggravating the drop in testosterone level. This study confirmed that men with a documented low testosterone level had a higher rate of depression than the general population. This suggests that depressed men should have their testosterone level measured, but if the result is low, the treatment would not automatically be testosterone replacement therapy, but treating the depression and lifestyle risk factors first. All treatable causes of a low testosterone level should be addressed before any consideration is given to replacement treatment.

Reference: J Sex Med 2015;12(8):1753–60

Abstract

Effect of endurance cardiovascular training intensity on erectile dysfunction severity in men with ischemic heart disease

Authors: Kalka D et al.

Summary: The effects of endurance training intensity and training-induced chronotropic responses on change in ED intensity were evaluated in men with ED and ischaemic heart disease; 115 men participated in a cardiac rehabilitation programme. ED intensity was assessed using the IIEF-5 questionnaire, which increased significantly from 12.46 at baseline to 14.35 in the study group following the cardiac rehabilitation programme. Mean training work also increased significantly from baseline, but none of the parameters describing training work were significantly related to the reduction in ED intensity.

Comment: The association of ED in men with CAD (coronary artery disease) is well documented due to the changes of endothelial dysfunction and atherosclerosis that affect all arteries, although ED is said to precede CAD by 3–5 years. It would be expected that any activity or exercise that improves blood flow in the coronary arteries would also improve erectile function. This exercise, which comes from cardiac rehabilitation training, did not improve erection severity. So the treatment of ED in the presence of CAD does not benefit from an exercise programme, but requires the standard ED treatments.

Reference: Am J Mens Health 2015;9(5):360–9
Abstract

The effect of duration of penile traction therapy in patients undergoing intralesional injection therapy for Peyronie's disease

Authors: Yafi FA et al.

Summary: These authors retrospectively reviewed 112 men who received 6–24 interferon α-2b injections each for PD, 31% of whom also used penile traction therapy on a daily basis. No significant differences were seen between men who used penile traction therapy and those who didn't for changes in penile circumference (+3.2 vs. +2.1mm [p=0.45]), curvature (–8.1° vs. –9.9° [p=0.49]) and stretched penile length (+2.4 vs. +1.3mm [p=0.56]); however, use of the therapy for ≥3 h/day was associated with a significantly greater increase in stretched penile length compared with nonuse (+4.4 vs. +1.3mm [p=0.04]).

Comment: The treatment of PD has in the past involved injection treatment with either verapamil or interferon. Soon to appear is collagenase injection. These injections are said to improve curvature, but do not overcome the shortening of the penis often seen in PD. The penile traction device is a rather cumbersome device worn on the penis for at least 3 hours a day for some months, which has been shown to modestly improve stretched penile length but not curvature. Traction does require discipline and persistence and can be a difficult concept to provide to a PD patient who is troubled by penile curvature and shortening, although the improvement in shortening may not be great, but meaningful.

Reference: J Urol 2015;194(3):754–8
Abstract

Independent commentary by Dr Michael Lowy, who is a men's health physician with a special interest in sexual medicine (male sexual dysfunction), relationship counselling and the general health issues of men. Dr Lowy began his medical career in general practice. Michael became a sexual health physician in 1996 (FAChSHM) and obtained a Masters in Psychological Medicine in 2001, and is currently a director of Sydney Men's Health in Bondi Junction.

Correlation between premature ejaculation and female vaginal penetration difficulties

Authors: Bronner G et al.

Summary: The relationships between PE in men and their female partner's vaginal penetration difficulties were explored in 125 heterosexual couples. Vaginal penetration difficulties included tampon insertion, gynaecological examination, self/partner-finger insertion and penile-vaginal intercourse. Partners of men with anteportal ejaculation experienced significantly more vaginal penetration difficulties, especially those related to penile penetration and tampon use, and they had greater pain intensity in vaginal penetration difficulties. Total male PE score did not significantly correlate with total FSFI (Female Sexual Function Index) or separate domains of female sexual function.

Comment: The most distressing form of PE is anteportal ejaculation, which is ejaculation before penetration. It is known that PE can result in sexual dissatisfaction between couples, which can progress to female sexual dysfunction. This study tells us that there is a relationship between anteportal PE and female sexual dysfunction in regards to female problems with penile penetration and tampon use. Thus in all cases of PE and especially in severe cases, the female partner should be included in the treatment, which should include a counselling programme.

Reference: Int J Impot Res 2015;27(4):152–6
Abstract

Association of androgen-deprivation therapy with excess cardiac-specific mortality in men with prostate cancer

Authors: Ziehr DR et al.

Summary: Men with cT1c-T3N0M0 prostate cancer who received brachytherapy with or without neoadjuvant ADT for a median 4 months were evaluated for excess cardiac-specific mortality during median follow-up duration of 4.8 years. Compared with no ADT, ADT was not associated with greater 5-year cardiac-specific mortality in 2653 men with no cardiac risk factors (1.08% vs. 1.27%; adjusted hazard ratio 0.83 [95% CI 0.39–1.78]) or in 2168 with diabetes mellitus, hypertension or hypercholesterolaemia (2.09% vs. 1.97%; 1.33 [0.70–2.53]), but the cumulative incidence was greater in 256 men with congestive heart failure or MI (7.01% vs. 2.01%; 3.28 [1.01–10.64]).

Comment: Men requiring ADT for metastatic prostate cancer are known to be at risk of health problems arising due to the induction of conditions associated with metabolic syndrome, particularly weight gain and insulin resistance. This is in addition to the onset of low libido and loss of a sense of wellbeing. This large study of 5077 men found that otherwise healthy men on ADT with no history of heart disease had no increased risk of cardiac-related mortality, as did men with a prior history of diabetes, hypertension or hyperlipidaemia. Yet men on ADT with a prior history of congestive heart failure or MI had a higher risk of cardiac death. This finding suggests that men on ADT require regular monitoring of their cardiovascular status.

Reference: BJU Int 2015;116(3):358–65
Abstract

Risk of acute myocardial infarction after androgen-deprivation therapy for prostate cancer in a Chinese population

Authors: Teoh JYC et al.

Summary: This was a retrospective review of Chinese men with prostate cancer treated primarily with radical prostatectomy or radiotherapy with (n=252) or without (n=200) further ADT. No significant difference was seen between ADT recipients and nonrecipients for pre-existing medical conditions or ECOG-PS (Eastern Coopertaive Oncology Group Performance Status), but ADT recipients were at increased risk of acute MI (p=0.004). A multivariate Cox regression analysis revealed that the only significant predictors of new acute MI were hyperlipidaemia, poor ECOG-PS and ADT use.

Comment: This study also looked at the medical problems arising from ADT for men who were already treated for prostate cancer with surgery or radiation. 452 men in a Chinese population were assessed looking at cardio- and cerebrovascular risk factors plus the ECOG-PS. The ECOG-PS quantifies cancer patients' general wellbeing and activities of daily life. The study found that in men with prostate cancer, there was an increased risk of anterior MI from ADT, hyperlipidaemia and poor ECOG-PS. Again these findings tell us that any man on ADT requires his cardiac status to be closely monitored.

Reference: BJU Int 2015;116(3):382–7
Abstract

Efficacy and safety of a fixed-dose combination of dutasteride and tamsulosin treatment (Duodart®) compared with watchful waiting with initiation of tamsulosin therapy if symptoms do not improve, both provided with lifestyle advice, in the management of treatment-naïve men with moderately symptomatic benign prostatic hyperplasia

Authors: Roehrborn CG et al.

Summary: The open-label CONDUCT study randomised treatment-naïve men with moderately symptomatic BPH at risk of progression (IPSS score 8–19; prostate volume ≥30mL; total serum PSA [prostate-specific antigen] level ≥1.5 ng/mL) to receive the fixed-dose combination of dutasteride 0.5mg and tamsulosin 0.4mg (n=369) or watchful waiting with protocol-defined tamsulosin therapy if symptoms did not improve (n=373) and followed them for 24 months; all participants also received lifestyle advice. Compared with the watchful waiting arm, the fixed-dose combination arm had a significantly greater decrease in IPSS score at 24 months (–5.4 vs –3.6 points [p<0.001]), a lower clinical progression rate (18% vs. 29%) and a significantly greater improvement in quality of life (assessed using the BPH Impact Index and question 8 of the IPSS; p<0.001). No unexpected toxicities were seen with the fixed-dose combination.

Comment: Ageing men often experience lower urinary tract symptoms associated with BPH. Sometimes in mild cases, watchful waiting is observed and treatment commenced with tamsulosin if symptoms do not improve. This study compared these men with those treated with pharmacological therapy with combined dutasteride and tamsulosin (Duodart®). The findings were a more rapid and sustained improvement in men with lower urinary tract symptoms on the combined therapy, with a reduced risk of BPH progression. This finding correlates with the results seen in clinical practice where men can delay surgical urological intervention due to the effectiveness of these types of medications.

Reference: BJU Int 2015;116(3):450–9
Abstract

The impact of relational factors on sexual satisfaction among heterosexual and homosexual men

Authors: Carvalheira AA & Costa PA

Summary: These researchers surveyed 2968 men from Portugal and Croatia with exclusive heterosexual behaviour and 285 with exclusive homosexual behaviour during the prior 5 years to explore variables predicting sexual satisfaction. Hierarchical multiple regressions revealed that for the heterosexual men, significant predictors of sexual satisfaction were age and sexual difficulties in step 1, frequency of intercourse and number of sexual partners in step 2 and intimacy and relationship length in step 3, whereas for homosexual men they were sexual difficulties and country in step 1, frequency of sexual intercourse in step 2 and relationship length and relationship intimacy in step 3.

Comment: This interesting study looked at factors influencing sexual satisfaction in both heterosexual and homosexual men. The number of straight men in the study was 2968, compared with 285 gay men; this appears epidemiologically correct, although a higher gay presence may have provided more robust findings. However, the findings are consistent with our understanding of male sexual satisfaction, where in either group the important factors were relationship factors that involve relationship length and couple intimacy. Other factors of age, sexual difficulties, frequency of intercourse and the number of sexual partners had some differences between the two groups, but the level of sexual satisfaction mainly related to the strength of the relationships in both groups. This suggests that when counselling is required for sexual difficulties in gay or straight men, the treatment strategies are the same.

Reference: Sex Relationship Ther 2015;30(3):314–24
Abstract

Have rates of erectile dysfunction improved within the past 17 years after radical prostatectomy?

Authors: Schauer I et al.

Summary: This systematic analysis of control arms (n=685) from 11 prospective RCTs on penile rehabilitation investigated whether potency rates after radical prostatectomy have improved over the years. Most studies reported rates of undisturbed erectile function of 20–25% assessed using the SEP3 (Sexual Encounter Profile; eight RCTs) and IIEF-EF (eight RCTs), with no substantial improvements seen over 17 years.

Comment: The technique of surgical removal of prostate cancer has significantly improved over the years, especially since the arrival of the da Vinci robot. But even a traditional open radical prostatectomy by an experienced surgeon can provide as good outcomes as the robot in terms of cancer removal with fewer side effects of incontinence and ED. Sexual rehabilitation is becoming more refined to aid sexual recovery. Yet this study shows that over the past 17 years, return of erectile function remains in the range of 20–25%. I assume this figure covers return of erectile function without treatment. With sexual rehabilitation's more aggressive methods these days, I would expect a higher return of erectile function. The authors do state that the study is limited by selection bias and other factors affecting the surprisingly poor outcome of erectile function return.

Reference: Andrology 2015;3(4):661–5
Abstract

The International Society for Sexual Medicine's process of care for the assessment and management of testosterone deficiency in adult men

Authors: Dean JD et al.

Summary: The ISSM (International Society for Sexual Medicine) Testosterone Deficiency Process of Care Committee sought to develop clearly worded, practical, evidenced-based recommendations for the diagnosis and management of testosterone deficiency for clinicians. Their final guideline was compiled following a comprehensive literature review, followed by a structured, 3-day panel meeting and 6-month panel consultation process using electronic communication. The resultant report provides a definition of testosterone deficiency and recommendations for assessing and treating the condition in different populations. Best practice treatment recommendations are provided to guide clinicians regardless of whether they are familiar with testosterone deficiency or not.

Comment: This international study to formulate guidelines on testosterone deficiency in men covers the ongoing controversy of what level of testosterone is a man to be regarded as hypogonadal? The recent PBS authority changes in Australia to reduce the treatable level of total testosterone from 8 nmol/L to 6 nmol/L arose due to concerns of unnecessary overprescribing of testosterone medications, particularly in the controversial area of late-onset hypogonadism. To support the change, studies were shown that showed lack of proof of benefit of treating testosterone levels over 6 nmol/L (with a normal luteinising hormone level). This change has caused some distress in the medical community, where even the PBS authority phone personnel are confused over the new rules. This J Sex Med article states that a total testosterone level over 12 nmol/L is normal, less than 8 nmol/L is abnormal and 8–12 nmol/L is a grey zone requiring further assessment. One can argue that this J Sex Med article was written mainly by a group of urologists with little input from andrologists, but low testosterone level belongs to the realm of andrology. However, this article adds to the ongoing controversy and confusion of what level is a man hypogonadal requiring treatment based on current evidence-based recommendations.

Reference: J Sex Med 2015;12(8):1660–86
Abstract

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