

## Erectile dysfunction

### More choice and improved care for patients with ED



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**T**adalafil (Cialis) is now licensed and should become available next year. Brock and McMahon review trial data on the safety and efficacy of tadalafil. It would appear to be a promising new phosphodiesterase 5 (PDE5) inhibitor but with a longer half-life and, therefore, a window

of opportunity of around 36 hours. This will be an advantage to some men but a disadvantage to others. It will, however, offer a useful and significant choice.

The association of erectile dysfunction (ED) and heart disease is important. ED may be the first manifestation of cardiovascular disease, and the latter may be advanced and have severe clinical consequences if not recognised. There continues to be interest in PDE5 inhibitors in heart disease yet some practitioners remain concerned about the safety issues. The paper by Bocchi et al from Brazil looks at sildenafil and heart failure. This should be reassuring and also interesting in that it suggests a possible beneficial effect of sildenafil on cardiac function

and exercise capacity. Further reassurance and advice on the management of cardiovascular disease is provided in the review by Graham Jackson. Jackson has established a male cardiovascular health clinic with a dedicated sexual advice nurse; this is proving a very helpful service that could well be copied by other cardiovascular clinics in which ED remains a rather neglected problem.

Organising a shared care service for ED is discussed in the paper by Wagner and the Lygon Arms Group (a pan-european interdisciplinary group of specialists in ED). The paper includes a worthwhile review of ED assessment and management, and a suggested structure and process for shared care between primary and secondary care.

Finally, I offer you two extraordinary case reports to keep you on your toes: successful and functional penile reconstruction for a man twice moved to amputate his member; and the riddle of the man in the nursing home with a very prolonged priapism. As usual it is the history that is important (if available) and not the investigations one can do!

### THE JOURNAL OF UROLOGY



### Tadalafil: safe and effective

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

**1** Tadalafil is a potent, selective phosphodiesterase 5 (PDE5) inhibitor that is in development as an oral treatment for erectile dysfunction (ED).

**2** To assess the efficacy and safety of tadalafil, 1112 men with mild to severe ED were randomised to placebo or tadalafil, at fixed daily doses of 2.5, 5, 10 or 20mg, for 12 weeks.

**3** Tadalafil was administered without restrictions on alcohol and food intake. This lack of restriction of dosing with either alcohol or food allows for greater convenience and is consistent with certain patient lifestyle needs.

**4** The three co-primary outcomes were changes from baseline in the erectile function domain of the International Index of Erectile Function (IIEF), and the proportion of 'yes' responses to questions 2 and 3 of the Sexual Encounter Profile. A Global Assessment Question was also used to assess efficacy.

**5** Compared with placebo, tadalafil significantly enhanced all efficacy outcomes. Efficacy increased with increasing dose of tadalafil.

**6** Patients receiving 20mg tadalafil experienced a significant mean improvement of 7.9 units in the IIEF domain score from baseline.

**7** A total of 75% of intercourse attempts were successfully completed, and 81% of subjects reported improved erections at end point, compared with 35% in the control group.

**8** Tadalafil was consistently efficacious across disease severities and aetiologies, and in patients of all ages.

**9** Tadalafil was well tolerated; headaches and dyspepsia were the most frequent adverse events.

Brock GB, McMahon CG, Chen KK et al (2002) Efficacy and safety of tadalafil for the treatment of erectile dysfunction: results of integrated analysis. *The Journal of Urology* **168**: 1332-6

### CIRCULATION

### Sildenafil and CHF are compatible

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

**1** Erectile dysfunction (ED) is common in patients with congestive heart failure (CHF). To retain sexual activity, patients may become noncompliant with CHF treatment that they feel causes or aggravates their ED; this could impair the success of CHF treatment.

**2** Concerns have been raised about the safety of sildenafil (an inhibitor of phosphodiesterase 5) in CHF, and the risk of triggering cardiovascular events by sexual activity. This paper investigates the acute effects of sildenafil on exercise, neurohormonal activation, and clinical status in patients with CHF and ED.

**3** The effects of 50 mg sildenafil on exercise and neurohormonal activation were studied in 23 men with CHF.

**4** Patients underwent a treadmill 6-minute cardiopulmonary walking test (WT) followed by a maximal cardiopulmonary exercise test (ET).

**5** In the second phase, patients took sildenafil as required for ED.

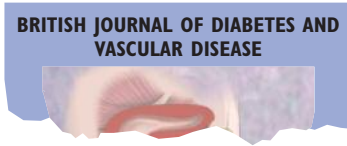
**6** Sildenafil reduced the heart rate, systolic blood pressure and diastolic blood pressure before the WT and ET tests, and decreased the  $V_e/V_{CO_2}$  slope during both tests.

**7** Sildenafil attenuated the increase in heart rate during the tests, and increased peak  $VO_2$  and exercise time.

**8** Sildenafil was tolerated and effective for ED treatment in CHF, and improved the exercise capacity.

Bocchi EA, Guimarões G, Mocelin A et al (2002) Sildenafil effects on exercise, neurohormonal activation, and erectile dysfunction in congestive heart failure: a double-blind, placebo-controlled, randomized study followed by a prospective treatment for erectile dysfunction. *Circulation* **106**: 1097-103

**‘There is no evidence that treating ED increases cardiac risk, provided that the patient is properly assessed and the couple appropriately counselled.’**



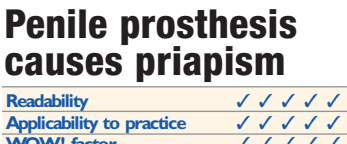
## Co-management of coronary artery disease and ED

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

- 1 Coronary artery disease and erectile dysfunction (ED) share the same risk factors and commonly coexist. Cardiac patients should therefore be routinely asked about ED.
- 2 Guidelines for minimising cardiac risk during sexual activity (for advice in the outpatient and inpatient setting) have been produced.
- 3 There is no evidence that treating ED increases cardiac risk, provided that the patient is properly assessed and the couple appropriately counselled.
- 4 Oral therapy is now the most widely used, with a high degree of effectiveness, but all therapies continue to have a place in management.
- 5 A dedicated male cardiovascular health clinic with a dedicated sexual advice nurse has been established, and the first year of this service saw a 90% success rate with the first 100 patients.

Jackson G (2002) Cardiovascular safety in erectile dysfunction treatment. *British Journal of Diabetes and Vascular Disease* 2(4): 301–4

**‘In the ideal holistic approach to management of ED patients, both primary care and specialist physicians have an important role to play.’**



## Penile prosthesis causes priapism

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

- 1 Priapism is a sustained erection in the absence of sexual stimulus.
- 2 In elderly patients, causes can be a veno-occlusive event in the corpora cavernosa, antipsychotic medication, hyperviscosity syndromes and malignancy. However, a proper history may not be available in the demented subgroup of the elderly.
- 3 This case report describes an unusual case of priapism.
- 4 General examination was unremarkable. However, it was not possible to aspirate blood from the cavernosa and there was extensive



## Potential for shared care of ED

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

- 1 Erectile dysfunction (ED) is associated with a wide variety of underlying conditions and cardiovascular comorbidities. Diverse treatment options are therefore required and several factors must be considered in order to customise and optimise therapy.
- 2 In the ideal holistic approach to management of ED patients, both primary care and specialist physicians have an important role to play.
- 3 This article reports a sequential approach to the diagnosis and treatment of ED, with the emphasis on shared care.
- 4 Primary care physicians have increasingly become the front line in the management of patients with sexual disorders. However, the majority of men with ED do not approach their physician.
- 5 Within the context of a shared care policy, most ED patients could be managed within primary care. However, the restricted availability of primary care physicians who treat sexual health could necessitate referral to a specialist.

Wagner G, The Lygon Arms Group (2002) A shared care approach to the management of erectile dysfunction in the community. *International Journal of Impotence Research* 14: 189–94



## Penile prosthesis causes priapism

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

- 1 fibrosis on penile ultrasound.
- 5 Penile Doppler ultrasound revealed calcifications and a well-organised tubular echogenic area in the corpora.
- 6 A relative gave the information that a penile prosthesis had been implanted into the patient 10 years previously. A straight film of the pelvis showed the prosthesis and the anchoring metal clips. Two weeks later the prosthesis erupted through the urethra.

Basu S, Biyani CS, Karamuri SS, Shah T (2002) Pseudo-priapism! Forgotten semirigid penile prosthesis. *International Journal of Impotence Research* 14: 418–19



## Replantations of penile autoamputations

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

- 1 A 27-year-old man with an acute paranoid schizophrenia cut his penis with a kitchen knife 1 cm distal from the mons pubis. Two hours later, he presented at a urology institution with the amputated penis.
- 2 There was a clear cut through all penile structures without major lacerations. There were diffuse bleedings from the cavernosal bodies and an arterial and venous bleeding from the dorsal vessels.
- 3 The amputated penis was immediately replanted and 1 year later the patient reported regained erectile dysfunction and was pleased with his restored body image.
- 4 For the following 9 years the patient was stable under medication and psychotherapy, but then he stopped taking medication. Two weeks later, the patient again severed his penis and, within 3 hours, presented at the institution.
- 5 An immediate replantation was performed, and after 6 months the patient reported normal erections.
- 6 Self-mutilations of the external genitals in psychiatric patients are also known as Klingsor syndrome. These patients tend to repeat self-aggressive actions, especially when their treatment is discontinued.
- 7 There have been at least 23 cases of penile autoamputation with successful microsurgical replantation since 1970. In many of these cases a restored erectile function and sensibility of the glans is reported within 1 year of the replantation.

Volkmer BG, Maier S (2002) Successful penile replantation following autoamputation: twice! *International Journal of Impotence Research* 14: 197–8