Erectile dysfunction

GPs role in managing ED in primary care

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This selection of papers contains some helpful and interesting points regarding current attitudes and treatments. Phosphodiesterase 5 (PDE5) inhibitors remain first line treatment – all have some theoretical advantages and vardenafil is featured in this issue. Also featured are some papers from general practice.

Attitudes of some GPs (and hospital physicians for that matter) remain varied and many continue to be reluctant to mention ED and/or to prescribe. This is well illustrated by the paper from Malaysia (see right) but is probably equally applicable here. Tomlinson and Wright's paper regarding impact is important, not least because the failure to respond to treatment may well compound psychological issues in some men. Men with diabetes, with their poor response to treatment, may be particularly vulnerable in this respect and this issue needs to be considered during assessment and treatment programmes. Also to be considered in this respect is the possibility of combining hormonal supplementation with PDE5 inhibitors in a subgroup of men with diabetes who suffer from ED.

The paper on injection treatment (see p166) is a reminder of potential side effects of which we need to remain aware. It is a pity we do not or are unable to use triple mixtures in the UK. Such mixtures are probably more effective in relatively resistant men and also overcome the common problem of pain with alprostadil alone.

Finally, I am sure readers will be interested in the natural remedies of medieval Persia (see p166), although current practitioners may find their credibility stretched a bit if suggesting some of these.

BRITISH MEDICAL JOURNAL

ED impact and subsequent use of sildenafil

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

1 Little attention has been given to the psychological and social impact of ED and its subsequent treatment despite psychogenic factors being an important cause. Sildenafil's launch raised high expectations; however it does not work successfully in all men, potentially causing more psychosocial concerns.

2 The aim of this study was to determine the effects of ED on men's emotional wellbeing and explore the impact of sildenafil treatment.

3 The experiences of 40 men with ED who had attended a men's health clinic in the past 12 months were gathered during this exploratory qualitative study. Impact of ED on men, expectations of sildenafil, and treatment impact on men and their relationships were the main outcome measures.

4 All of the men experiencing ED were distressed and their condition had negative effects on self-esteem and relationships. A sense of emasculation was the most common initial reaction.

5 Twenty-eight respondents first heard about sildenafil through the media and in most cases had high expectations because of this.

6 Successful treatment with sildenafil caused great improvement in wellbeing. In unresponsive patients there was huge disappointment and lowered morale.

7 ED, whether psychogenic, physical or mixed, has considerable impact on men, particularly their self-esteem and masculinity. Sensational media reporting about sildenafil generated huge expectations that further reduced morale in men for whom it did not work.

Tomlinson JM, Wright D (2004) Impact of erectile dysfunction and its subsequent treatment with sildenafil: qualitative study. *BMJ* **328**: 1037–39

INTERNATIONAL JOURNAL OF IMPOTENCE RESEARCH

Role of general practitioners in ED management

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

1 Although studies show that about half of men aged 40 to 70 have some degree of ED, only 1 in 10 sufferers between 18 and 59 have consulted a GP.

2 This article explores the roles and perceptions of 28 GPs in Malaysia managing patients with ED.

3 Main outcomes measured included active or passive ED management, perceptions of ED and treatment, and factors influencing prescribing decisions.

4 A majority of GPs took a passive role in management as most perceived it as a nonserious condition and some viewed it as mainly psychological.

5 Reasons given for reluctance in prescribing anti-ED drugs included perceptions of them being lifestyle drugs with potentially serious side effects, fear of appearing to 'push' the drugs and worries about being blamed should the patient develop side effects.

6 Some GPs still felt that patients with ED should be managed by specialists.

7 Patients' backgrounds influenced prescribing, with prioritisation of treatment according to co-morbidities and, in some cases, marital status.

8 Participating GPs remained passive in identifying and treating patients with ED. Their perception of ED, drug treatment and the patient's background contributed to this.

Ng C, Low WY, Tan NC, Choo WY (2004) The role of general practitioners in the management of erectile dysfunction – qualitative study. *International Journal of Impotence Research* **16**: 60–63

'A combination of testosterone and PDE5 inhibitors may be considered to improve erectile function and improve quality of life.'

EUROPEAN UROLOGY

ED and hormonal supplementation

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

1 The role of testosterone in sexual desire is established but it is unclear what the effect of low levels on the pathophysiology of human erectile mechanisms are.

2 Hormonal abnormalities are present in 10–20 % of ED patients, raising to 35 % in those over 60 years.

3 Sexual desire and erectile function are responsive to testosterone. Different degrees of deficiency may lead to reduced relaxation of penile smooth muscle and endothelial cells without greatly changing sexual desire. It may also control PDE5 expression and activity in the corpus cavernosum.

4 Androgen supplementation may improve the therapeutic efficacy of PDE5 inhibitors in selected men with testosterone below 10–13 nmol/l and/or free testosterone below 200–250 pmol/l, and in ageing men with partial androgen deficiency who fail first-line oral treatments.

Aversa A, Isidori AM, Greco EA, et al (2004) Hormonal supplementation and erectile dysfunction. *European Urology* **45**: 535–38

EUROPEAN UROLOGY

Efficacy and safety of vardenafil

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

'Vardenafil, when used in a flexible dose regimen, is highly efficacious and generally well tolerated, and can be dose-adjusted to achieve an optimal response.'

1 Vardenafil improves erectile function in men with ED in fixed doses. This study aimed to assess its efficacy and tolerability in flexible-dose regimens.

2 Patients (n=323) in this multicentre trial were given 10 mg vardenafil or placebo for 4 weeks, then had the option of remaining on 10 mg or switching to 5 or 20 mg (or corresponding placebo) for 4 weeks. For the last 4 weeks dose-switching was optional.

3 The International Index of Erectile Function – Erectile Function domain score of those on vardenafil improved significantly from moderate to mild ED versus placebo.

4 Improved erections were reported in 80–86 % of men on vardenafil compared to placebo (21–36 %). Successful Sexual Encounter Profile 2 and 3 rates were improved with vardenafil compared to placebo. Side effects were generally mild and transient.

5 Flexible-dose vardenafil was well-tolerated and produced improvement in erectile function in men with ED.

Hatzichristou D, Montorsi F, Buvat J et al (2004) The efficacy and safety of flexible-dose vardenafil (Levitra) in a broad population of European man. *European Urology* **45**: 634–41

INTERNATIONAL JOURNAL OF IMPOTENCE RESEARCH

Medieval Persian remedies for ED

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

1 Interest in sexual potency has been present for centuries.

2 Medieval Persian physicians documented ancient civilisations' medical traditions and added knowledge gained by their own empirical findings.

3 This article is an overview of medieval Persian knowledge of ED.

4 The Perisans gave definitions of ED, described apparent causal factors, listed natural substances used in treatment, and also noted hygienic and dietary rules.

5 Many of the approaches they used are still accurate and accepted in modern medicine, though more could be used.

Khaleghi Ghadiri M, Gorji A (2004) Review of impotence: Natural remedies for impotence in medieval Persia. *International Journal of Impotence Research* **16**: 80–83

INTERNATIONAL JOURNAL OF IMPOTENCE RESEARCH

Side effects of injected vasoactive substances for ED

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

1 Intracavernous injection (ICI) pharmacotherapy has helped many patients with organic impotence but complications of pain, subcutaneous haematoma, syncope, prolonged erection and penile fibrosis can occur.

2 The aim of the study was to evaluate side effects of intracavernous vasoactive substances using 6 months' follow-up with clinical, sonographic and laboratory assessment.

3 Group I consisted of 168 patients trained on self-injection therapy using one of three protocols: papaverine; prostaglandin E1 (PGE1); and trimix (papaverine, phentolamine and PGE1). Group II were 21 patients presenting for the first time with complication of intracavernous injection therapy.

4 Papaverine protocol patients had the highest incidence of prolonged erection, haematoma and fibrosis. Trimix protocol had greater incidence of penile pain than papaverine and PGE1 protocols. Complications in group II patients were prolonged erection (10 patients), fibrosis (7 patients), cavernositis (3 patients) and one case of intracavernous needle breakage.

5 ICI is effective as second-line treatment but clinical and sonographic follow-up should be carried out on patients on self-injection programmes, both at initiation phase and regular follow-up visits.

Moemen MN, Hamed HA, Kamel II, Shamloul RM, Ghanem HM (2004) Clinical and sonographic assessment of the side effects of intracavernous injection of vasoactive substances. *International Journal of Impotence Research* **16**: 143–45

‘Standardised mortality ratio analysis provided no evidence to suggest a higher incidence of fatal myocardial infarction or ischaemic heart disease among men in England taking sildenafil.’

BJU INTERNATIONAL

Sildenafil safety in general practice since 1999

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

1 Sildenafil (Viagra) was launched in the UK in 1998 and was the the first PDE5 inhibitor to be licensed for ED.

2 The objective of this study was to evaluate the safety of sildenafil use in general practice in England. Prescription-event monitoring was to be used to quantify the incidence of a range of adverse events related to the use of sildenafil and to identify any adverse drug reactions (ADRs) that had not previously been recognised.

3 Dispensed prescription details were used to gather exposure data from patients starting sildenafil treatment for ED between April and August 1999. General practitioners (GPs) were sent a ‘green form’ questionnaire about 18 months after the first dispensed prescription for each patient. Outcome data were derived from returned forms.

4 GPs returned 24 835 (54.7 %) of the forms posted and 22 473 (98.4 %) contained useful data.

5 Of the 22 471 male patients receiving prescriptions, impotence was the major primary indication in 73.8 % of cases and diabetes in 0.8 % of cases.

6 GPs attributed 145 events to adverse drug reactions to sildenafil. Of the 3951 reasons given for stopping treatment, ischaemic heart disease was the most common (135 cases). In the first month of observation, the clinical condition most frequently reported (with 99 events) was diabetes mellitus and/or hyperglycaemia.

7 Compared to the male population in England in 1998, the standardised mortality ratio (SMR) for death due to ischaemic heart disease in the first 8893 of 22 473 patients was 31.41 (95% confidence interval).

8 No unexpected events occurred in this study identifying the safety profile of sildenafil use in the community. SMR analysis revealed no greater incidence of death from ischemic heart disease in those taking sildenafil than the general male population in England.

Boshiere A, Wilton LV, Shakir SAW (2004) Evaluation of the safety of sildenafil for male erectile dysfunction: experience gained in general practice use in England in 1999. *BJU International* **93**: 796–801

‘Sildenafil citrate and dimix produced a good positive response in patients with mild and mild-to-moderate ED. More complex compounds of vasoactive drugs [. . .] and penile implants were more effective in patients with moderate and severe forms of ED.’

AMERICAN JOURNAL OF CARDIOLOGY

ED treatment programme in patients with CVD

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

1 In patients with cardiovascular disease, ED is often related to the disorder, although it may also be secondary to ß-blockers, ACE inhibitors or other antihypertensive drugs.

2 In this study the effectiveness of a progressive treatment programme in this subgroup of patients was examined.

3 Treatment was started with sildenafil 25–100 mg in all 417 patients without contraindications. Thirty-six patients had contraindications; most commonly long-term nitrate therapy. Intracavernous injections of a dimix, trimix or quadmix cocktail of vasoactive drugs were given to patients with a contraindication, adverse reaction or negative response (inability to achieve vaginal penetration) to sildenafil.

4 Drug dosages were increased or a penile prosthesis was suggested if treatment was ineffective during the two-year follow-up.

5 Of the 417 patients offered sildenafil, 205 (49.2 %) had a positive response.

6 Intracavernous injections were given to the 248 patients with a negative response or contraindication to sildenafil. There were 135 patients (54.4 %) that responded positively to the dimix. Of the remaining 113 patients, 85 (75.2 %) responded with the trimix and a further 16 (57.1 %) with the quadmix. A third of the 12 patients unresponsive to the quadmix responded to sildenafil with trimix and two remaining patients had a penile implant.

7 Four-hundred-and-forty-seven patients were followed-up after two years. Treatment with sildenafil alone was successful in 29.3 % of patients. A success rate of 20.6 % with dimix, 27.3 % with trimix, 2.7 % with quadmix and 0.4 % with trimix plus sildenafil was seen. Five patients had a penile prosthesis.

8 Spontaneous erection occurred in 10.7% of patients (95 % of whom were taking aspirin) while 2 % still had a negative response.

9 Treatment was stopped due to family and health reasons in 5.8 % of the patients.

10 Patients with both ED and cardiovascular disease responded very successfully to this progressive treatment programme. Immediately after the trial, erections sufficient for vaginal penetration were achieved in 98.7 % of patients, and on follow-up two years later the success rate was 92.2 %.

Israilov S, Baniel J, Shmueli J, et al (2004) Treatment program for erectile dysfunction in patients with cardiovascular disease. *American Journal of Cardiology* **93**: 689–93