Sanjiva Wijesinha
Leon Piterman
Catherine Kirby

The male reproductive system

An overview of common problems

Background

Many male reproductive system problems could be perceived as being embarrassing, which may be one of the reasons that they are often not identified in general practice.

Objective

This article provides an overview of some common problems affecting the male reproductive system, and outlines current treatment options.

Discussion

Erectile dysfunction, premature ejaculation, loss of libido, testicular cancer and prostate disease may cause embarrassment to the patient and, occasionally, the general practitioner. We describe how patients affected by these conditions may present to general practice, and discuss the reasons why they may not present. We also discuss how GPs can overcome difficulties in identifying and dealing with their male patients suffering from male reproductive system issues.

Keywords

erectile dysfunction; sexual dysfunction, physiological; libido; men

CPD

Diseases of the male sex organs are not identified as often as they should be for several reasons. For example, the patient has a disease, but does not present to his general practitioner, either because he does have symptoms but is embarrassed and reluctant to disclose the fact[1] (eg. testicular swelling, loss of libido, urinary symptoms or erectile difficulty), or he has no obvious symptoms, such as in early prostate cancer. Another reason may be that doctors do not routinely ask for symptoms of male reproductive system diseases when taking a history – either because they believe (especially in older male patients) that a sexual history is unimportant, that asking such intimate questions may offend the patient, because they feel embarrassed to talk about these personal matters, or even because they themselves are not confident about their knowledge on these issues.[2]

For a useful consultation to occur, it is important that the GP is comfortable with both the patient and the problem – and vice versa.

Erectile dysfunction

Erection problems may have a physical, psychological, behavioural or iatrogenic basis.

Erectile dysfunction (ED) is defined as the inability to have or maintain an erection hard enough for satisfactory sexual intercourse. It remains one of the most common untreated conditions in Australia. A study by Pinnock et al[3] showed ED to be strongly correlated with age – with erections inadequate for intercourse affecting 3% of men aged 40–49 years, increasing to 64% of men aged 70–79 years.

While in younger men ED may be more commonly due to psychological causes (eg. performance anxiety), in many middle aged and older men, the inability to achieve a hard erection is the result of faulty arterial flow to the corpora cavernosa of the penis – the pathophysiology being lack of blood flow rather than lack of male hormones.

A symptom or a disease?

The importance of ED being identified is that in the majority of men, ED is not a disease in itself, but rather an early symptom of cerebro-cardio-vascular disease.[4] Arterial narrowing initially manifests itself in the small arteries (such as the penile arteries) before narrowing of larger arteries (such as the coronary and cerebral arteries) declares itself in the form

of symptoms such as angina and transient ischaemic attacks (TIAs). If men became more open to discussing the sensitive issue of ED with their GP, they would benefit from the opportunity of having their occult cardiovascular disease being diagnosed and managed, thereby minimising their risk of a premature heart attack.

Ideally, GPs asking their male patients about erectile function as a risk factor for cardiovascular disease should become as routine as inquiring about smoking history, angina or breathlessness. Management of ED involves investigating for other evidence of cardiovascular disease or risk factors (eg. hypertension, diabetes, elevated blood lipids, smoking) and introducing appropriate therapy. There is evidence that lifestyle interventions can benefit both general health and ED.[4]

Treatment

Among the medications available at the primary care level for efficaciously treating the symptom of ED in most affected males are PDE5 inhibitors (eg. sildenafil, tadalafil, vardenafil). Contraindications should be noted, in particular the concomitant use of long and short acting nitrates and nitrate-like medications.[4] Guidelines[4] exploring the use of PDE5 inhibitors highlight the importance of in-consultation brief education and counselling before use, so that both the male patient and their partner have a realistic idea of what to expect from treatment.

Premature ejaculation

Premature ejaculation (PE) is a common and highly sensitive matter and most men avoid broaching the problem with their GP.[5] When raised (either by the GP or the patient), a frank and supportive approach goes a long way to opening up conversation and working toward a more satisfying sex life for both the patient and their partner.

Assessment

Lifelong (primary) or acquired (secondary) PE is typically diagnosed via a sexual, medical and psychological history:[4,6]

- Sexual history: onset and duration, ejaculatory latency time, perceived control over ejaculation, frequency of occurrence, past sexual relationships and functioning
- Medical history: general history, medications, past or current infections, past traumas
- Psychological history: guilt, inhibitions or misinformation about sex, negative sexual experiences, anxiety, depression, and the impact of PE on the patient and their partner.

A brief physical examination of the vascular, endocrine and neurologic systems may be undertaken if the patient's history suggests an underlying medical condition, such as chronic illness, genitourinary infection, Peyronie disease, endocrinopathy or autonomic neuropathy.[4]

Treatment

Premature ejaculation treatments have a success rate of around 75%.[6] Current European Association of Urology guidelines[4] first line treatment options for the management of primary/lifelong PE include:

- the off-label use of daily selective serotonin reuptake inhibitor (SSRI) therapy, which acts to delay ejaculation within 1–2 weeks of therapy commencement. The recommended dosages are paroxetine (20–40 mg/day), sertraline (25–200 mg/day), or fluoxetine (10–60 mg/day)
- the application of topical anaesthetic to reduce penile sensitivity, eg. lidocaine-prilocaine cream (5%) applied 20–30 minutes before sexual activity. (Note: A condom must be used to avoid causing numbness in the partner).

Second line treatments include behavioural and cognitive techniques. These have a short term success rate of around 50–60%, but are less effective in the long term.[4] Behavioural techniques are thought to be most effective when combined with pharmacotherapy. 'Stop-start' techniques involve ceasing sexual stimulation before ejaculation, and recommencing when arousal is reduced. Other behavioural techniques focus on reducing sexual stimulation by exploring sexual activities or positions that may be less stimulating or arousing, using double condoms to decrease penile sensitivity, or cognitive distractions to reduce arousal.

Concurrent psychological counselling can also be beneficial in increasing the patient's sexual confidence and self esteem.[6]

Secondary PE is often seen in patients with ED – a trial of PDE5 inhibitors may be warranted.[6]

Libido

Libido relates to a person's desire for sexual activity and sex seeking behaviour. Levels of libido vary from person-to-person, and there is considerable individual variation, with libido changing across relationships as well in different social and environmental circumstances. Low libido becomes a problem when it creates distress for the patient and/or their partner and difficulty across the relationship.[7]

Unrealistic perceptions about male libido may strongly influence a man's feelings of shame and embarrassment if they experience low sex drive.

Assessment and management

Loss of libido is a not uncommon presenting symptom in general practice and can be affected by many factors including:

- fatigue – such as from long or irregular working hours
- stressors – from any source, but potentially related to work, finances, health or relationships
- lack of psychological wellbeing – such as depression, anxiety or low self esteem
- relationship problems – such as conflict, poor intimacy or sexual incompatibility.

Systematic questioning is required to elicit symptoms in these areas, as loss of libido may need to be judged 'by the company it keeps'. While there may be some reduction in a man's libido with ageing (as in menopausal women) this is by no means universal.[7] Reduction in libido to discordant levels in either partner may negatively impact the relationship in terms of dissatisfaction and conflict, which could lead to the partner seeking alternative relationships.

While low libido is more commonly the result of psychosocial factors, other causes must be excluded. There are many biological (eg. diabetes, thyroid disorders and other endocrinopathies), iatrogenic (eg. medications such as SSRIs, antipsychotics and beta-blockers) and lifestyle (eg. excessive alcohol use) causes that potentially cause loss of libido that need to be looked for and rectified.[8]

Erectile dysfunction, while not necessarily a cause of low libido, may result in sexual avoidance behaviour that ultimately leads to loss of libido. While reduction in libido is a manifestation of depression, the treatment of depression using some SSRIs may also complicate this symptom by further exacerbating low libido and/or potentially creating difficulties in reaching orgasm (anorgasmia).[4]

General practitioners should feel empowered to discuss libido in the context of comprehensive history taking and assessment. Management may include information, counselling, and being mindful of the libido-reducing side effects of some medications.

Testicular lumps

Although testicular cancer is rare – diagnosed in about 750 Australian men annually[9] – it is the most common solid cancer in men aged 18–39 years. Risk factors include a family history, a history of undescended testis or congenital inguinal hernia.[9] Embarrassment delays many young men with testicular swellings seeking medical opinion. While most testicular swellings are the result of benign conditions such as cysts or hydroceles, an enlarged testicle can be an early sign of a testicular tumour. Therefore an important community message is that any man with a swelling in the testis should consult a doctor so as to exclude testicular cancer.

There is no evidence from randomised controlled trials – and it is unlikely that such trials could ever be designed – to prove that regular testicular self examination reduces mortality. A recent Cancer Council Australia position statement recommends that men become aware of the health of their testicles, and encourages men with testicular lumps to present early for medical assessment.[9] It does not recommend encouraging testicular self examination.[9] It stands to reason that early detection (before metastases have developed) reduces the need for toxic therapies such as major abdominal surgery and chemotherapy.[10]

Prostate disease

Many men may find it embarrassing to talk about lower urinary tract symptoms (LUTS) such as nocturia, urge incontinence and reduction of the urinary stream; symptoms which could indicate benign prostatic hypertrophy. Men may also be embarrassed to undergo a digital rectal examination, which forms part of the assessment for prostatic concerns. This is despite an Australian study showing that 7% of men aged 40 years and more had moderate to severe LUTS,[1] and that 57% of men were moderately or very concerned about prostate cancer.[1]

Key points

- For successful outcomes, both patient and doctor must be comfortable with each other – and with talking about the problem.
- Most cases of erectile dysfunction are the result of reduced blood flow to the penis rather than reduced androgens.
- Treatment for premature ejaculation has a success rate of about 75%.
- Loss of libido as a presenting symptom usually occurs in a psycho-social context – but it is important to exclude biological or iatrogenic causes.
- Men with testicular lumps should be encouraged to present promptly for medical assessment.
- Embarrassment about admitting to LUTS and undergoing a digital rectal examination are factors that preclude men benefiting from early detection and management of prostate conditions.
- Much can be done for men with sexual problems by education and the destigmatising of these conditions.

Resources

Up-to-date clinical guidelines on best practice management of men's sexual and reproductive disorders are readily available online and include:

- European Association of Urology guidelines: www.uroweb.org/guidelines/online-guidelines
- Andrology Australia – clinical summary guidelines: www.andrologyaustralia.org/health-professionals/clinical-summary-guidelines.

Authors

Sanjiva Wijesinha MBBS(Ceylon), MSc(Oxford), FRCS, FRACGP, is Associate Professor, Department of General Practice, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Victoria. sanjiva.wijesinha@monash.edu

Leon Piterman AM MBBS, MD, MMed, MEdSt, FRCP(Edin), FRACGP, is Professor of General Practice and Pro Vice Chancellor, Monash University Berwick and Peninsula campuses, Melbourne, Victoria

Catherine Kirby BSocSc(Hons), PhD, is Research Fellow, Office of the Pro Vice Chancellor, Monash University, Melbourne, Victoria.

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correspondence **afp@racgp.org.au**