

OUT OF THE WATER CLOSET: IT'S TIME TO TACKLE BENIGN PROSTATE DISEASE

Summary

This report has been compiled by the Men's Health Forum for the All Party Parliamentary Group on Men's Health.

It finds that:

- ◆ Benign prostate disease – benign prostatic hyperplasia (BPH) and prostatitis – is a grossly neglected issue despite its major effects on many men's quality of life. The impact of benign prostate disease is likely to grow as the male population ages.
- ◆ The majority of men are ill-informed about the location, role and diseases of the prostate gland. Little work has been done to increase men's awareness of prostate health, especially in relation to benign disease.
- ◆ There are doubts about the effective diagnosis of many cases of BPH and prostatitis.
- ◆ Although there have been significant improvements in the treatment of BPH, many cases are still treated less than effectively. Prostatitis remains especially difficult to treat in a high proportion of cases.
- ◆ There is an urgent need for greater, publicly-funded health promotion activity on benign prostate disease. This should include improved patient information for men who are affected.
- ◆ Health professionals, especially in primary care, require education on the diagnosis and treatment of benign prostate disease. An expansion of urology services in secondary care is also required.
- ◆ There is an urgent need for more research into the causes, diagnosis and treatments for benign prostate disease.

Introduction

Prostate cancer is, belatedly, beginning to achieve the attention it undoubtedly deserves. The Department of Health is funding a large-scale trial to help determine the best treatments for the disease while greater media coverage is contributing to greater public understanding. The willingness of several public figures to be open about their condition has also generated considerable publicity and interest.

Benign prostate disease, however, remains little publicised and little understood by most men. This is despite the fact that a much higher proportion of men suffer from benign disease than prostate cancer. While benign disease is rarely life-threatening, diagnosis is often delayed or even inaccurate, the treatments available are often ineffective and the quality of life of those affected can be severely diminished. It is not for nothing that benign prostate disease has been described as a 'cinderella' problem.

What is benign prostate disease?

There are two forms of benign prostate disease: benign prostatic hyperplasia (BPH) and prostatitis.

Benign prostatic hyperplasia

BPH is a condition where the prostate gland becomes enlarged, probably as a result of prostate cells becoming increasingly sensitive to male hormones with aging (1). Some studies suggest that a diet which is low in vegetables and a sedentary lifestyle increase the risk of BPH but these links remain unproven (2).

Because the prostate surrounds the urethra, enlargement restricts the flow of urine out of the bladder causing the characteristic symptoms of the disease. These include:

- ◆ urine flow that stops and starts
- ◆ weak flow
- ◆ need to strain to pass urine
- ◆ feeling that the bladder cannot be fully emptied
- ◆ frequent urination.

One of the most common, and troublesome, symptoms of BPH is a need to pass water several times during the night. BPH can also cause complications including acute or chronic urinary retention (ie. an inability to urinate), bladder stones and kidney problems.

As well as having to endure urinary and related problems, research suggests that men with BPH are more likely to feel anxious and depressed than men without BPH (3). Many cannot travel far from a toilet and find that their social lives are seriously affected.

BPH is very common – in fact, most men over 40 show some signs of enlargement (4). By the age of 60, about half of all men will have urinary symptoms caused by BPH. The proportion affected rises to 80% by the age of 80 (1). Approximately 500,000 men are currently diagnosed with BPH every year in the UK but 2.5-3.5 million men are actually believed to suffer from the condition (5). These numbers are

highly likely to increase as the number of older men increases and as more men seek PSA (prostate specific antigen) testing for prostate cancer (both BPH and cancer can produce a raised PSA level). It is estimated that the number of men with either prostate cancer or BPH will double by 2020 (6).

Prostatitis

Prostatitis covers a range of conditions, most commonly an inflammation of the prostate gland with symptoms that may include:

- ◆ chills and fever
- ◆ pain in almost any part of the pelvic/genital region

- ◆ pain or difficulty in passing urine
- ◆ a need to urinate frequently

The inflammation can be caused by a bacterial infection (frequently *E. coli*) or possibly from urine entering the prostatic ducts. Prostatitis can be either acute or chronic and similar symptoms may also occur without any signs of infection or inflammation (a condition known as prostatodynia).

Prostatitis is a common condition. The chronic form of the condition alone affects 9-14% of men worldwide (7). Prostatitis in general accounts for almost one-quarter of all consultations with urologists in the UK (4). The disease

most often affects men aged 30-50 but men of any age can develop it.

Many cases become chronic and can be very painful or debilitating. There is evidence that prostatitis is linked to psychological stress and work-related and sexual problems (8) – one study found that about half of a group of men being treated for the most common male sexual dysfunction, premature ejaculation, had prostatitis (9). It has also been hypothesised, but not yet proven, that there is a link between prostatitis and prostate cancer (10).

Men's knowledge

Most men know very little about benign prostate disease. According to a MORI poll published this year on behalf of the Prostate Cancer Charity, only 12% of men know what the prostate gland does and 20% wrongly believe that it is located in the testes (11). A recent small-scale study of 15-17 year old male school students in Cheshire found that they knew nothing about the prostate and its function (12). The Men's Prostate Health Project at the University of Wolverhampton, which conducted a study of 565 men with benign prostate disease, concluded that 'there is very great widespread ignorance about BPH and prostatitis' (13).

It is still common for men to believe that 'waterworks' problems are a consequence of ageing rather than a possible symptom of an underlying disease.

Even when men have been diagnosed, they often still feel under-

informed. The Prostate Cancer Charity states: 'We often encounter men who have been diagnosed with BPH or prostatitis seeking information through our Helpline. This indicates that perhaps it is difficult for them to find specific information sources for non-cancerous conditions and that there may be confusion about the difference' (11).

To date, there has been no national health promotion campaign on benign prostate disease led by the Department of Health, the Health Development Agency or Health Promotion England. The campaigns that have been run have been relatively small-scale and initiated by the pharmaceutical industry or the voluntary sector.

Research by the Men's Prostate Health Project suggests there is a need for much better patient information about benign prostate disease. Men and their families could benefit from good quality

information on a wide range of areas, including diagnosis, symptoms, treatment and intervention options (and their possible side-effects), the likely course of conditions, available services (both inside and outside the NHS) and other men's experiences of the conditions (14).

Interestingly, the Men's Prostate Health Project also found that although men may be generally slow to seek help with benign prostate disease, many eventually respond by actively seeking to take more control over their condition by becoming much better informed through self-help groups and particularly the Internet. This challenges the traditional view that most men are uninterested in their health and reinforces the need for better patient information.

Diagnosis

Because the symptoms of benign prostate disease overlap with other conditions, including prostate cancer, specific tests are required for an accurate diagnosis. These may include a digital rectal examination (the doctor feels the size and consistency of the prostate with a finger), urine tests, blood tests and ultrasound. To check for bacterial infection, a common cause of prostatitis, a doctor will massage the prostate to obtain a sample of secretions.

There are problems with the diagnosis of benign prostate disease,

however. Patients examined by GPs and urologists may find that they are not offered the range of diagnostic tests that might be expected if best practice was followed in every case. This is partly because many GPs are not well-enough informed about the conditions and, in secondary care, because urologists are over-stretched (15). It is also known that many GPs do not routinely ask men who present with other conditions if they have any of the symptoms of prostate disease, even though this could lead to the earlier diagnosis of many more cases.

The Prostate Research Campaign UK has also expressed a particular concern

about the way in which some GPs deal with men with prostatitis: 'Some of the most distressing communications we receive are from men with prostatitis. It seems to be misunderstood by many general practitioners and we even hear of some men being told not to make a fuss and that their symptoms are imagined' (16).

The Prostate Help Association (PHA), a charity established in 1993 to provide information about prostate disease to the general public, goes further, claiming that 'the majority of medics are unable to diagnose prostatitis.' The PHA believes that most

doctors do not have the time or resources to undertake the necessary tests, ideally based on a series of massaged prostate samples taken over a period of a week or so (17).

Interestingly, the study by the Men's Prostate Health Project suggested that 'men under 65 with a particular set of symptoms are most likely to be diagnosed with prostatitis whilst men over the age of 65 with the same particular set of symptoms are likely to

be diagnosed as suffering from BPH. To put it most simply, diagnosis seems to be unsophisticated and not particularly helpful to patients' (14)

Diagnosis is often delayed not just as a result of failings in primary and secondary care but simply because men fail to report symptoms to a health professional. A Dutch study of almost 1000 randomly selected men aged 50 and over found that 20% had moderate-severe symptoms of BPH but the

majority of these (60%) did not consult their GP (18)

The Men's Prostate Health Project comments: 'There is a significant number of men with BPH and prostatitis who "suffer in silence" and are too embarrassed, or simply too ignorant, to make contact with their GP or consultant. We found that some men even had problems in finding suitable language to describe their symptoms' (13).

Treatment

Benign prostatic hyperplasia

BPH is usually treated with drugs or surgery, although men with very mild symptoms may simply have their condition monitored.

Moderately severe BPH is now routinely treated with drugs, primarily:

- ◆ 'Alpha-blockers' – these work by relaxing the muscles at the neck of the bladder and in the prostate and thereby reducing the pressure on the urethra. This treatment tends to take effect after a few doses and produces relatively few side-effects: about 10% of men develop tiredness, dizziness and headaches (6). However, the Prostate Research Campaign UK observes that there are relatively few long-term outcome studies of this treatment and suggests 'there is increasing concern that some proportion of men so treated may sustain long-term loss of bladder muscle tone. This in the long term may result in a worn out bladder for which there is no solution other than a permanent catheter' (16).
- ◆ 'Five alpha-reductase inhibitors' – these shrink the prostate by blocking the production of the main hormone involved in prostate enlargement. This treatment tends to take effect more slowly – treatment for up to a year or so may be needed to produce maximum volume reduction – but it can be particularly appropriate for men with larger prostates. The side-effects, which affect about 5% of men, can include a reduced sex drive and erection problems (6).

Drug treatments are believed to be effective in 60-75% of cases and significantly reduce the need for surgery (1). For those men for whom drug treatments are not appropriate or

effective, there are several surgical options, primarily:

- ◆ Transurethral resection of the prostate (TURP). This is the most common surgical intervention (30-50,000 TURPS are performed every year in the UK (5)). Under a general anaesthetic, an instrument is inserted up through the penis to cut out the middle of the enlarged prostate. Apart from short-term pain or discomfort, the most common side-effect is 'retrograde ejaculation' – during orgasm, semen passes into the bladder rather than out through the penis. 70-90% of men are affected in this way although most seem to find it an acceptable problem. 90% of men notice an improvement in symptoms after a TURP but up to 20% will require further surgery within eight years (6).
- ◆ Transurethral incision of the prostate (TUIP). This is more appropriate for men who have smaller prostates that are nevertheless still causing serious obstruction problems. Rather than removing a part of the prostate, one or two small cuts are made in the neck of the bladder and in the prostate to reduce the obstruction. The risk of retrograde ejaculation following a TUIP is one in 10 but there is a possibility that the symptoms will recur. 80% of men notice an improvement in symptoms after a TUIP but over 20% will require further surgery, usually a TURP, within eight years (6).
- ◆ Open prostatectomy. This is a major surgical procedure that is normally only used in the most serious cases of BPH. The central part of the prostate is removed through an incision made in the lower abdomen. About 70% of men will suffer retrograde ejaculation and around 20% will develop erection problems. 98 per cent of men notice an

improvement in symptoms after an open prostatectomy but 10% will require further surgery within eight years (6).

New minimally invasive treatments under development include transurethral microwave thermotherapy (a urethral probe generates heat which destroys prostate tissue) and laser therapy (a urethral laser probe destroys prostate tissue). These treatments are still being assessed but appear to be less effective than the traditional approaches. 'No one of these many and varied techniques has won widespread acceptance and there remains considerable uncertainty as to what is the best way forward in terms of minimally invasive technology,' states the Prostate Research Campaign UK (16).

There has been increasing interest in herbal treatments, especially saw palmetto. Many men with BPH treat themselves with these although the clinical evidence of their effectiveness remain limited, not least because it is difficult to obtain funding for large-scale trials.

Prostatitis

If bacterial infection is identified as the cause of the problem, antibiotics will be prescribed. (They may also help in cases where an infection is not detected.) Antibiotics have to be taken for a relatively long period, perhaps up to three months, to ensure that all the bacteria are destroyed. An anti-inflammatory drug, such as ibuprofen, may also be prescribed to reduce prostatic inflammation. If there are no signs of bacterial infection, alpha-blockers may be prescribed to relax the muscles in the prostate and bladder in order to relieve the symptoms.

Prostatitis is notoriously difficult to treat effectively and many men with the condition are described as 'heart-sink'

patients by their doctors – in other words, they keep returning to their doctor for help but the doctor eventually runs out of treatment options. 'This disease is still largely a conundrum and more work needs to be done to define more precisely the causes and the treatments that are effective in this chronic and sometimes disabling condition' (15).

The Prostate Research Campaign UK comments: 'Very little progress has been made in [the] management [of prostatitis] over the past several decades. Treatment is often ineffective. Overall, the management of prostatitis is highly unsatisfactory for most men and there is an urgent and pressing need for more research in this area' (16).

While there have very clearly been significant improvements in the treatment of BPH, both by drugs and surgery, there is still a considerable need for further research and development into new treatment options for both BPH and prostatitis. There is still a large number of men who are not treated effectively, who suffer unpleasant side-effects and who discontinue their treatments. The Men's Prostate Health Project study found: '[Many] men tend to "give up" on the medical profession. Since these men do not return to their GPs or consultants, it is tempting to believe that their conditions have been alleviated; urgent work is needed here to explore whether in fact this is the case' (13).

Recommendations

- ◆ There is need for high-profile national, publicly-funded health promotion campaigns on benign prostate disease to increase men's awareness of benign prostate disease and to encourage men with symptoms to seek help. This must take into account the new insights developed by the Men's Health Forum and others into how to target health messages at men and be run in a variety of appropriate settings (e.g. the workplace, social clubs, sports venues).
- ◆ Improved patient information materials should be introduced and made widely available through primary and secondary care as well as through voluntary organisations working on men's health.
- ◆ The healthcare infrastructure must be improved to meet the both current and future demand from men with benign prostate disease. This must include:
 - The improved education of GPs in diagnosis, treatment and when it is appropriate to refer patients to secondary care.
 - An expansion in urology services in secondary care to reduce waiting times and to cope with the near-inevitable steady increase in workload linked to an ageing male population.
- The feasibility of creating primary care centres of excellence in prostate health should be examined. The Highcliffe Medical Centre in Dorset, a primary care initiative which provides a community-based urology service, could provide a model for the development of similar services elsewhere. The service provides the first step in identifying which resources should be allocated to each patient, including whether they require primary or secondary care. The service has improved patient access to assessment and follow up, reducing inappropriate referrals to hospital (19).
- ◆ Improved support for voluntary organisations to support men with benign prostate disease is essential.
- ◆ More research is required into the causes of benign prostate disease. This could contribute to advice to men about risk-reduction.
- ◆ There is a pressing need for more research into new drug and less invasive surgical treatments.

The Men's Health Forum

The Men's Health Forum is an independent charity that tackles the issues affecting the health of men and boys in England and Wales. It does this through research, policy development, developing innovative projects and professional training. The Forum works closely with the All Party Parliamentary Group on Men's Health.

For further information about the Forum, contact:

The Men's Health Forum,
Tavistock House, Tavistock Square,
London WC1H 9HR
Tel: 020 7388 4449
Fax: 020 7388 4477
Email: office@menshealthforum.org.uk
Web: www.menshealthforum.org.uk

Registered Office as above. A registered charity
(No 1087375). A company limited by guarantee
(No 4142349 – England).

October 2001

Acknowledgements

The Men's Health Forum wishes to thank all those who contributed to the compilation of this report: Dr Jon Barnardes, The Men's Prostate Health Project, University of Wolverhampton; Andy Dunleavy, Men's Health Project manager, Health Promotion Service for North Cheshire; Mr Roger Kirby, Consultant Urologist, St. George's Healthcare NHS Trust; Merck Sharp and Dohme Ltd; Pfizer Ltd; Prostate Cancer Charity; Prostate Research Campaign UK. The contents of this report are solely the responsibility of the Men's Health Forum.

Sources

- 1 L. Rodwell, *You and your prostate* (Self-Help Direct; London, 1997).
- 2 L. Denis, et al, 'Diet and its preventive role in prostatic disease', *European Urology* 1999;35(5-6):377-387; J.B. Meigs, et al, 'Risk factors for clinical benign prostatic hyperplasia in a community-based population of healthy aging men', *Journal of Clinical Epidemiology* 2001 Sep;54(9):935-944.
- 3 K.K. Tsang and W.M. Garraway, 'Impact of benign prostatic hyperplasia on general well-being of men', *Prostate* 1994;23(1):1-7.
- 4 R.S. Kirby and M.G. Kirby, 'Impact of prostatic disease on men's health' in R.S. Kirby, et al (eds), *Men's Health* (Isis Medical Media; Oxford, 1999).
- 5 Information supplied for this report by Merck Sharp and Dohme.
- 6 R.S. Kirby, *The Prostate: Small gland, big problem* (Prostate Research Campaign UK; Northwood, 2000).
- 7 D.A. Shoskes, 'Use of antibiotics in chronic prostatitis syndromes', *Canadian Journal of Urology* 2001 Jun;8(3Suppl):24-28.
- 8 A. Mehik, et al, 'Fears, sexual disturbances and personality features in men with prostatitis: a population-based cross-sectional study in Finland', *BJU International* 2001 Jul;88(1):35-38.
- 9 E. Screponi, et al, 'Prevalence of chronic prostatitis in men with premature ejaculation', *Urology* 2001 Aug;58(2):198-202.
- 10 Information supplied by Professor Tim Oliver, Department of Medical Oncology, St Bartholomew's Hospital, London.
- 11 Information supplied for this report by the Prostate Cancer Charity.
- 12 Information supplied for this report by Andy Dunleavy, Men's Health Project manager, Health Promotion Service for North Cheshire.
- 13 Information supplied for this report by Dr Jon Barnardes, Men's Health Prostate Project, University of Wolverhampton.
- 14 J. Barnardes, et al, *Prostate Health: Common conditions other than cancer. A summary report on the impact of prostatitis and benign prostatic hyperplasia on men's lives and those of their families* (University of Wolverhampton; Wolverhampton, 1998).
- 15 Information supplied for this report by Mr Roger Kirby, Consultant Urologist, St. George's Healthcare NHS Trust.
- 16 Information supplied for this report by Prostate Research Campaign UK.
- 17 See Prostate Help Association's website, www.personal.u-net.com/~pha
- 18 M.J. Wille-Gussenhoven, et al, 'Prostate symptoms in general practice: seriousness and inconvenience', *Scandinavian Journal of Primary Health Care* 1997 Mar;15(1):39-42.
- 19 See http://193.132.77.97/beacons_db/LearnActivityDetails.asp?Reference=HX

IT'S TIME TO TACKLE BENIGN PROSTATE DISEASE