

Treatment options for benign prostatic hyperplasia

Choice depends on patient's weighting of severity and bother, with risks and benefits of various options

Papers p 1059

Lower urinary tract symptoms consistent with benign prostatic hyperplasia become increasingly prevalent with age. While rarely life threatening, bothersome irritative urinary symptoms like urgency, frequency, and nocturia, and obstructive ones like a weak stream, hesitancy, intermittency, and incomplete emptying occur in up to 70% of men aged 70 years and older. Community and practice based studies suggest that men can expect slow progression of the symptoms. However, these symptoms can wax and wane without treatment, and rates of acute urinary retention range from 1-2% per year.¹ By the age of 80 years, an estimated one in four men will have undergone treatment to relieve symptoms due to benign prostatic hyperplasia that reduce quality of life.²

Treatment options depend, in part, on the severity of symptoms and how bothersome they are. Options include watchful waiting (conservative or lifestyle management), phytotherapies, prescription medications, surgical procedures, and minimally invasive techniques. To help choose between treatments patients and providers rely on evidence from randomised controlled trials and systematic reviews to provide reliable information about efficacy and safety of various treatments.

For many years, transurethral resection of the prostate has been the gold standard treatment for benign prostatic hyperplasia. In 1994, almost 400 000 procedures were performed in the United States at a total cost of \$5 billion.³ In the United Kingdom approximately 40 000 resections are carried out annually.⁴ A survey of 376 consultant urologists in the United Kingdom showed that 38% of men with symptoms due to benign prostatic hyperplasia referred to them were treated surgically, 33% with drugs, and 29% conservatively. Commonly used surgical procedures were transurethral resection of the prostate in 79% and transurethral incision of the prostate in 15%. Only 6% of those treated surgically had minimally invasive procedures such as laser prostatectomy. These findings reflect the treatment provided to men with more severe or complicated symptoms than those routinely presenting to primary care practitioners. Resection rates have declined in part because of concerns related to associated adverse effects⁴ and the belief that alternative treatments result in fewer harms with comparable efficacy.

The report by Brookes and colleagues in this issue (p 1059) examines the impact of three treatments on

one important factor related to treatment decision making for lower urinary tract symptoms—sexual function.⁵ As part of a randomised controlled trial evaluating the efficacy and adverse effects of transurethral resection of the prostate, non-contact laser therapy, and conservative management in men with lower urinary tract symptoms and chronic urinary retention the authors used the International Continence Society's sexual function questionnaire (ICSsex) to assess aspects of erectile stiffness, ejaculatory volume, pain and discomfort on ejaculation, and whether sexual life was spoiled by urinary symptoms. Contrary to previous evidence, and widely held beliefs, their results suggest that erectile function was no different after transurethral resection compared with non-contact laser therapy and that resection was better at relieving pain and discomfort on ejaculation than either conservative management or laser therapy. Previous findings from this trial indicated that transurethral resection of the prostate was more effective in terms of symptom score, maximum urinary flow, and treatment failures.⁶ However, transurethral resection of the prostate resulted in more complications related to treatment and longer hospitalisation.

How should these findings be incorporated into the healthcare decision making process? Firstly, as has recently been described in the *BMJ*, men care about their health.⁷ However, they may find it difficult to discuss their concerns, provide fewer and briefer explanations, tend to attend their general practitioner late in the course of their condition, and often receive significantly less of doctors' time in medical encounters than women. Secondly, prostate related problems and sexual function are important components of men's health. They can have a profound impact on quality of life. Questionnaires such as the international prostate symptom score and bother index, the international index of erectile function, and the International Continence Society's sexual function score can reliably assess the severity and bother of lower urinary tract symptoms and erectile and sexual function. They are easy to administer even in busy primary care settings and should be routinely used to determine the severity and impact of these important healthcare issues. Thirdly, complications associated with treatment are not limited to sexual dysfunction and may influence decisions. Selecting treatment options requires men to balance the bother due to lower urinary tract

symptoms with the relative efficacy and adverse effects of various interventions.

For men with mild to moderate urinary symptoms or bother, management by primary care physicians is appropriate. α Blocking drugs are the preferred pharmacological treatment for improving symptoms and flow measures regardless of the size of the prostate. Combining α blockers with finasteride provides no greater improvement in symptoms or flow measures than α blockers alone.⁸ α Blockers are associated with dizziness, asthenia, headache, and postural hypotension.⁹ They have not been clearly shown to prevent long term complications from benign prostatic hyperplasia or the need for surgery. Long term use of α blockers (for example, more than 15 years), especially for men with more severe symptoms may, result in net higher costs than initial surgical intervention. Phytotherapy preparations appear to provide modest improvement in urinary symptoms and flow rates and are well tolerated.¹⁰ However, the quality of existing data, long term efficacy, and purity of preparations is still in doubt.

Men with severe symptoms, urinary retention, recurrent urinary infections, incontinence, haematuria, or bladder stones should be referred to a urologist. If these conditions are due to benign prostatic hyperplasia, surgical or minimally invasive procedures are generally warranted. A systematic review of randomised controlled trials comparing transurethral resection of the prostate with transurethral incision of the prostate showed that while resection resulted in greater improvement in urinary flow rates the two procedures were equivalent in the more clinically relevant outcome of improvement in symptoms at 12 months.¹¹ Transurethral incision of the prostate resulted in a lower incidence of complications including the need for blood transfusions, risk of retrograde ejaculation, operative time, and hospital stay. Another systematic review compared transurethral resection of the prostate with laser techniques and showed that resection led to greater improvement in urinary symptoms compared with either non-contact or contact laser therapies. (R Hoffman et al, VA health services research and development annual meeting, Washing-

ton, DC, 2002). However, men treated with lasers had less morbidity and fewer complications, although many trials did not report adverse events. There were no differences between groups in the incidence of erectile dysfunction, retrograde ejaculation, or urinary incontinence. The findings by Brookes provide useful additional data.⁵

Incorporating the above information into shared decision making related to the diagnosis and management of benign prostatic hyperplasia is feasible. This approach will result in men choosing treatment options based on their personal weighting of the severity and bother of their condition with the relative risks and benefits of different options. It will provide high quality, cost effective, evidenced based health care and enhance patient satisfaction.

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A fresh new contract for general practitioners

Complex, with risks attached, but addresses many of the profession's concerns

The imposition of the 1990 contract by Kenneth Clarke was a blow from which professional morale among general practitioners has never really recovered. For many general practitioners it marked the end of a golden age. The "Red Book" has long been criticised as bureaucratic and inflexible, and the launch of personal medical services pilots in 1998 was an acknowledgment of the need for change. Currently, allocation of resources only poorly reflects patients' needs; the contract is highly focused on the individual practitioner and fails to recognise adequately the role of the practice team; quality measures are sparse and crudely applied; and perverse incentives often serve to reward poor quality services. A recent BMA survey exposed high levels of stress,

poor morale, and planned early retirement or exit from the profession.¹ The proposals for a new national contract, announced on 19 April jointly by the NHS confederation and the British Medical Association, mark an important departure.^{2,3} A new weighted capitation formula will replace the work of the recently abolished medical practices committee. Crucially, the national pricing of the contract will take into account the changing demands on primary care through an annual assessment of workload. If workload rises, new resources will be made available—a major victory for the profession's negotiators.

The new contract will be between a primary care organisation and a practice (rather than with an individual doctor), and services will be categorised as

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