Cochrane Corner

Symptomatic benign prostatic hyperplasia

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Benign prostatic hyperplasia (BPH) is a nonmalignant enlargement of the prostate which may lead to obstructive lower urinary tract symptoms. There are two groups of prescribed medications that are indicated for benign prostatic hyperplasia. These are the alphablockers, two of which are funded in New Zealand, terazosin (Hytrin) and prazosin (Minipress) and the five alpha reductase inhibitors of which finasteride (Proscar) is available in New Zealand. The pharmacologic use of plants and herbs (phytotherapy) for the treatment of lower urinary tract symptoms (LUTS) associated with benign prostatic hyperplasia has been growing steadily. Phytotherapeutic preparations containing beta-sitosterols, derived from the South African star grass, Hypoxis rooperi, or from species of Pinus and Picea, are available for the treatment of BPH. Other phytotherapeutic agents that have been studied for the treatment of symptoms of BPH are: Cernilton, prepared from the ryegrass pollen Secale cereale; the extract of the African prune tree, Pygeum africanum and the extract of the American Saw palmetto or dwarf palm plant, Serenoa repens (also known as Saw palmetto). There is information below on non-prescription medication. It is not known how many of these are currently available in New Zealand but 'alternative' medications are readily available internationally. Although a number of these 'alternative' medications appear effective, many of the studies are small and of questionable quality.

Table 1. Medications that can be used for symptomatic benign prostatic hyperplasia

Drug	Long term success	Evidence	Advantages	Disadvantages
Terazosin up to 10 mg daily (Hytrin)	Significantly better than placebo at 12 months on international prostate symptom score (IPSS)	Cochrane Review[1]	Better symptom control than finasteride (Proscar) and fully funded by Pharmac. Also improved peak urine flow rate	More dizziness than placebo. More dizziness, weakness and rhinitis than finasteride. Less impotence 6% than finsteride 9%
Finasteride (Proscar)	Significantly better than placebo at four years	Clinical evidence[2]	Symptom reduction, fewer prostatectomies and less acute urinary retention. Better response in patients with a high PSA score i.e. bigger prostates	More impotence 6.6% v. 4.7% and ejacultary dysfunction 4.4% v. 1.7% and decreased libido 4% v. 2.8% than placebo. Not fully funded

Table 2. Non-prescription medication that can be used for symptomatic benign prostatic hyperplasia

Drug	Long term success	Evidence	Advantages	Disadvantages
Beta-sitosterol	Trials lasted 4–26 weeks and compared with placebo there was a reduction in IPSS scores	Cochrane Review[3]	Lowers IPSS scores	GI adverse effects 1.6% more than placebo 0%. Impotence more common 0.5% vs 0%. Different preparations available hence not clear as to generalisability
Cernilton (Rye grass pollen extract)	Trials lasted 4-26 weeks. Increased self rated symptom improvements	Cochrane Review[3]	Lowers IPSS score. Reduced nocturia	More withdrawals than placebo 4.8% vs 2.7%. Limited quality of studies and different preparations make generalisability difficult
Pygeum africanum	Mean duration of studies two months. Twice the reported improvement in symptoms and an increase in peak urine flow rate of 23%. There was a reduction in residual urine volume and nocturia (down 19%)	Cochrane Review[5]	Improved symptoms and signs	Short and limited quality of studies and different preparations make generalisability difficult
Serenoa repens also known as Saw palmetto	Mean study duration 4–48 weeks. Nocturia down 0.76	Cochrane Review[6]	Similar effectiveness to finasteride	Withdrawals from studies, placebo 7% Sereona 9% and finasteride 11%

References

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2. Clinical evidence Benign prostatic hyperplasia. BMJ Publishing Issue 7 2002 London.
3. Wilt T, Ishani A, Mac Donald R, Stark G, Mulrow C, and Lau J. Beta-sitosterols for benign prostatic hyperplasia (Cochrane Review). In: The Cochrane Library, Issue 4, 2002. Oxford: Update Software.
4. Wilt T, Mac Donald R, Ishani A, Rutks I, Stark G. Cernilton for benign prostatic hyperplasia (Cochrane Review). In: The Cochrane Library, Issue 4, 2002. Oxford: Update Software.
5. Wilt T, Ishani A, Mac Donald R, Rutks I, Stark G. Pygeum africanum for benign prostatic hyperplasia (Cochrane Review). In: The Cochrane Library, Issue 4, 2002. Oxford: Update Software
6. Wilt T, Ishani A, Mac Donald R. Serenoa repens for benign prostatic hyperplasia (Cochrane Review). In: The Cochrane Library, Issue 4, 2002. Oxford: Update Software.

Members of the Royal New Zealand College of General Practitioners can have access to the full reviews by contacting Cherylyn Pearson at the College in Wellington. For the access codes to the Cochrane library contact cpearson@rnzcgp.org.nz at the College. Access to clinical evidence can be obtained at http://www.clinicalevidence.org/