

Benign prostatic hyperplasia (BPH)

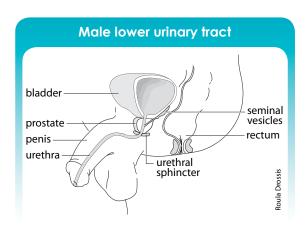
Benign prostatic hyperplasia (BPH) is a common problem in older men that can affect urinating.

What is the prostate?

- The prostate gland is about the size and shape of a walnut (in younger men) and found between the bladder and the beginning of the penis.
- The urethra (a long narrow tube) runs through the centre of the prostate from the bladder to a muscle (called a sphincter) that controls the flow of your urine. (See diagram: Male lower urinary tract)
- Both urine and semen leave the body through the urethra.
- As men age (in their 60s, 70s, and older), the prostate can grow to the size of a plum or larger.
- As it grows, it can make the urethra narrower.
- The prostate makes some of the semen, containing sperm, which flows out (ejaculates) when you have an orgasm.

What is benign prostatic hyperplasia (BPH)?

- Benign prostatic hyperplasia (BPH) often happens to older men (usually in their 60s, 70s or 80s) where their prostate grows larger.
- It happens very seldom in men under the age of 40 years.
- Only half of men with BPH have any symptoms from it.



What are symptoms for BPH?

- If there are symptoms with BPH, the following are some of them.
 - You urinate very often.
 - You wake up in the middle of the night to urinate (however this is often due to many factors and BPH may be only one of these).
 - You need to urinate so suddenly and strongly that you may not get to the bathroom in time (urge incontinence).
 - You feel as if you can't empty your bladder fully.
 - Your urine doesn't start right away (hesitancy).
 - The flow of urine coming out is weak and you need to strain to help the flow.
 - Your flow of urine stops and starts.
 - Urine leaks out if you cough or sneeze (stress urinary incontinence).
 - You find urinating painful.
 - You see blood in your urine.
 - You cannot urinate when you want to (acute urinary retention).
- It is comforting to know that BPH is **NOT** a cancer, but it does have symptoms that are like cancer and other diseases.
- Your doctor may need to do some tests to confirm if you have BPH.

How is BPH diagnosed?

- Your doctor may ask you to answer a number of questions and fill out a questionnaire about your symptoms.
- Giving this information will help to decide the seriousness of your problem and symptoms, and how much your symptoms bother you.
- Your doctor will inspect your prostate by putting a gloved finger coated with a lubricant into your rectum (Digital Rectal Exam or DRE).
 - You may feel a slight pressure or discomfort, but it shouldn't hurt.
 - It is important to relax and take deep breaths and let your doctor know at once if you feel any pain.

- This exam will help to decide if:
- You have an enlarged prostate.
- There are any lumps or firmness that might show cancer in your prostate.
- You may need to give a urine sample to check for an infection or for some other urinary problem besides BPH.
- For some men, a PSA (Prostate Specific Antigen) blood test may be recommended to help rule out cancer.
 - Even if the PSA tests are high, it does not automatically mean that you have prostate cancer.
 BPH can also cause PSA results to be high.
- Your doctor may need to do other tests to diagnose BPH and figure out the right treatment for you.

What is the treatment for BPH?

- Treatment for BPH is based on the seriousness of your symptoms and how much they bother you and impact your quality of life.
- Your overall health will affect the type of treatment you will receive.
- Your first choice of treatment will also affect the subsequent treatments you may receive
- Several different treatments are available which are described below.
 - Surgical options include transurethral resection of the prostate (TURP) for smaller prostates and simple prostatectomy for large prostates. Most provinces also offer prostate enucleation and green light photo-vaporization of the prostate (PVP)
- It is important, then, to talk with your doctor about your options before deciding what is best for you. If you are considering surgery, you can also use the CUA BPH surgical decision aid available on the CUA website: https://cua-bph-decision-aid.web.app/
- Newer surgical treatment options are available as well. These options are not available at every centre. Some are NOT covered in certain provinces. Please talk to your doctor if you are interested in these.
- Non-surgical options include behaviour or lifestyle changes and specific medication regimes and are described below.

What are the different treatment options that I have?

- If your symptoms are not too serious or do not bother you a great deal, changing your behaviour or lifestyle may help you with your symptoms.
- Every once in a while, your doctor will go over any changes you make.

Behaviour or lifestyle changes that might help BPH

- If you are drinking a lot of liquids, try drinking less especially before bedtime
- Avoid caffeinated beverages, alcohol, and spicy foods.
- If possible, avoid medications that may make your symptoms worse (such as cold medicines).
- Set up a regular schedule for urinating with the help of your doctor.
- Avoid constipation (eat enough fibre each day and drink lots of water).

Are there medications that will help with BPH symptoms?

- Medication is commonly chosen by patients as a treatment option.
- There are four main types of drugs that treat BPH (alpha blockers, 5-alpha reductase inhibitors, antimuscarinics, and beta-3 agonists)
 - They work in different ways.
 - Sometimes, multiple medications may be taken at the same time.

Alpha blockers

(such as tamsulosin, alfuzosin, silodosin)

- Help you to relax the muscles in and around your prostate and the opening to your bladder
- Help you to urinate more easily
- Bring about benefits in a few days (but benefits will stop if you stop taking the medication)
- Can have side effects such as:
- tiredness
- congested nose
- dizziness
- dry orgasm (orgasm with little or no semen)
- Some side effects go away a few weeks after you start the medication and other side effects don't last and will stop when you stop the medication.
- If the side effects really bother you, stop taking the medication and get in touch with your doctor as soon as you can.

5 alpha reductase inhibitors (such as finasteride, dutasteride)

- Block the hormones that cause your prostate to grow.
- Are most useful in men with larger prostates.
- Take some time (at least 6 months) to shrink the prostate.
 - Your urinating may not get better for several months.
- Return of BPH if the medication is stopped.
- Possible side effects with this medication may include:
 - producing less semen
 - losing your normal sexual drive (libido)
 - having trouble with sexual erections
- Often taken along with an alpha blocker. These two drugs together may keep your symptoms of BPH from getting worse.
- If the treatment with two drugs is successful, you may be able to stop taking the alpha-blocker.

Overactive bladder medications (such as antimuscarinics like tolterodine and fesoterodine and beta-3 agonists like mirabegron)

- Help to relax the muscles of the bladder, preventing sudden contractions.
- Reduce the urgency and frequency of urination.
- Can provide relief within a week or two of starting the medication.
- Can have side effects such as:
- dry mouth
- constipation
- increased heart rate (for antimuscarinics)
- cognitive impairment in elderly patients (for antimuscarinics)
- elevated blood pressure (for beta-3 agonists)
- Some side effects may diminish a few weeks after starting the medication.
 - Other side effects will cease once you discontinue the medication.
- If the side effects become intolerable, stop taking the medication and get in touch with your doctor as soon as you can.

- People often try herbal therapies, even if there is little scientific proof that they actually work for BPH. (See table: Herbal therapies)
- Let your doctor know if you are taking herbal remedies for your BPH.

Herbal therapies

- Lots of commercial advertising as benefit for BPH symptoms
- Very popular choice for BPH treatment
- Scientific proof of benefit to help BPH is limited
- Few side effects

Is there surgery that will help with BPH symptoms?

- Your doctor will recommend surgery if:
 - BPH is causing constant urinary problems (see section: How is BPH diagnosed? for more information)
 - BPH is affecting your kidneys
 - Infections or blood in your urine keep coming back
 - Your medication is causing side effects or is not helping your BPH.
- Surgery will be the choice if your symptoms are very serious or bother your daily living.
- As with surgery in general, there are potential complications that you and your doctor will need to talk about before deciding on surgery.
- There are two main types of surgeries for treating BPH: Transurethral resection/enucleation/vaporization of the prostate and (simple) open prostatectomy.

Transurethral resection/enucleation/ vaporization of the prostate

- To avoid pain during the surgery, you will have either a spinal anesthetic ("freezing you from the waist down") or a general anesthetic (puts you "to sleep").
- A special tool is passed through the urethra in your penis and reduces the size of your prostate. (See diagram: *Male lower urinary tract*)
- There are different ways of doing this surgery based on the tool used.
- For example, a resectoscope is used during transurethral resections to scoop out the inside of your prostate.
- This surgery also widens the urethra so you can urinate more easily.
- Certain options may not be available at all centres or hospitals.

Open (or simple) prostatectomy

- Open or simple prostatectomy is surgery for BPH that takes out a larger part of the prostate than TURP.
- It uses a small cut (incision) in your lower abdomen.
- This surgery is saved for prostates that are too large to manage safely with transurethral resection.
- This surgery should not be confused with "radical prostatectomy" which takes out the whole prostate for prostate cancer.

Bottom Line

- BPH is common with men who are getting older.
- It can cause urinary problems that affect daily life and your health.
- If BPH symptoms bother you, there are treatments available that can help.
- It is important to talk about options with your doctor before you decide which treatment might be best for you.

This publication is produced by

Canadian Urological Association The Voice of Urology in Canada



Association des **U**rologues du Canada La voix de l'urologie au Canada

The information in the publication is not intended to convey medical advice or to substitute for direct consultation with a qualified medical practitioner. The Canadian Urological Association disclaims all liability and legal responsibility howsoever caused, including negligence, for the information contained in or referenced by this brochure. © 2023. Canadian Urological Association. All rights reserved.

54E-BPHE-10-23