

**Transurethral resection of the prostate (TURP)  
for benign prostate enlargement**

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## Surgery Overview

During transurethral resection of the prostate (TURP), an instrument is inserted up the [urethra](#) to remove the section of the prostate that is blocking urine flow.

TURP usually requires hospitalization and is done using a [general](#) or [spinal anesthetic](#).

## What To Expect After Surgery

The hospital stay after TURP is commonly 2 to 3 days.

Following surgery, a [catheter](#) is used to remove blood or blood clots in the [bladder](#) that may result from the procedure. When the urine is free of significant bleeding or blood clots, the catheter can be removed and the man can go home.

Strenuous activity, constipation, and sexual activity should be avoided for about 6 weeks. Symptoms such as frequent urination will continue for a while due to irritation and inflammation caused by the surgery, but they should ease during the first 6 weeks.

## Why It Is Done

Your doctor may recommend TURP if symptoms caused by [benign prostatic hyperplasia \(BPH\)](#) or BPE (Benign Prostatic Enlargement) have not improved in response to lifestyle management and medications. Some men develop urine retention and cannot pass urine at all. If normal urination does not resume on a trial of voiding, a TURP may be necessary.

TURP is now the most common surgery used to remove part of an enlarged prostate. Open prostatectomies (in which an incision is made into the abdomen) generally are needed only when the prostate is very large.

## How Well It Works

On the average, men experience an 85% improvement in their American Urological Association ([AUA symptom index](#)) score.<sup>1</sup> For example, if you had a score of 25, after this surgery it might be reduced to about 4. Men who are very bothered by their symptoms are most likely to notice great improvement in their symptoms after TURP; men who are not very bothered by their symptoms are less likely to notice a significant change.

In men who have moderate to severe symptoms of prostate enlargement, TURP is more effective than watchful waiting in relieving urinary symptoms. Studies have found that:<sup>2</sup>

- 90% of men undergoing TURP had reduced symptoms compared to 39% of those who used watchful waiting.
- After 5 years, 10% of those who had undergone TURP had a "treatment failure," mainly inability to urinate, urine left in the bladder, and an increase in the severity of symptoms. This compares to 21% of men using watchful waiting during the same period who had an increase in symptom severity or complications.
- TURP improved the AUA symptom score by about 10 points over 8 months.

TURP and transurethral incision of the prostate (TUIP) had equal effectiveness.<sup>2</sup>

Compared to visual laser ablation, TURP was more effective at relieving symptoms but required a longer hospital stay. Another laser treatment method, contact laser vaporization, is as effective at reducing symptoms as TURP.<sup>2</sup>

## Risks

The risks of having transurethral resection of the prostate (TURP) include problems with sexual performance, incontinence, and problems from surgery.

### Problems with sexual performance

- [Erection problems](#) may develop in men who did not have them before the procedure. The risk of this may depend on how sexual performance is defined and measured, how sexually active the man was before the surgery, and how old he is. Many men in the age group who are likely to have BPH also have some problems with getting an erection. Subsequent erection problems are reported by about 3 to 34 men out of 100.<sup>1</sup> Viagra (sildenafil) is effective in helping most men achieve an erection after they have had TURP.

- A study comparing TURP with watchful waiting and laser surgery indicated that men who had TURP were no more likely to have erection problems, pain on ejaculation, or a perception of inferior sex life than men who either had laser therapy or practiced watchful waiting.<sup>3</sup>
- Some older studies that reported high rates of erection problems in men after TURP may have failed to assess the sexual function of the men before surgery and may have had differing definitions of what an erection problem is, so they may have overestimated the numbers of men who had an erection problem as a side effect of TURP.<sup>3</sup>
- Ejaculation backward into the bladder (retrograde ejaculation) is very common, occurring in about 25 to 99 men out of 100.<sup>1, 4</sup> This does not affect sexual function.

### **Loss of ability to control urine flow (incontinence)**

- A small number of men (about 1%) say they are completely unable to hold back their urine after the surgery.<sup>1</sup>
- Some men find that they can still hold in their urine after the surgery, but they tend to leak or dribble.

### **Problems related to having surgery**

- About 3% of men require a blood transfusion during or after surgery.<sup>5</sup>
- TURP syndrome occurs in about 2 out of 100 men who have TURP.<sup>1</sup> This syndrome occurs when the body absorbs too much of the fluid used to wash the area around the prostate while prostate tissue is being removed. The symptoms of TURP syndrome include mental confusion, nausea, vomiting, high blood pressure, slowed heartbeat, and visual disturbances. TURP syndrome is temporary (usually lasting only the first 6 hours after surgery) and is treated with medication that removes excess water from the body (diuretic).
- About 5 out of every 100 men need the operation again after 5 years.<sup>4</sup>
- Repeat surgery because of a complication of the surgery is needed by less than 5% of the time.<sup>1</sup>

### **What To Think About**

Surgery usually is not required to treat BPH, although some men may choose it because their symptoms bother them so much. Choosing surgery depends largely on your preferences and comfort with the idea of having surgery. Things to consider include your expectation of the results of the surgery, the severity of your symptoms, and the possibility of developing complications from the surgery.

Men who have severe symptoms often have great improvement in their quality of life following surgery. Men whose symptoms are mild may find that surgery does not greatly improve their quality of life. Men with only mild symptoms may want to think carefully before deciding to have surgery to treat their BPH.

For men who have clear indications for surgery, TURP may be less effective than open prostatectomy in relieving the symptoms of BPH. (See the Surgery section of the topic Benign Prostatic Hyperplasia [BPH].)

About 10% of men who have TURP or open prostatectomy are found to have previously undetected early-stage prostate cancer. Cancer discovered this way generally is slow-growing, often requires no additional treatment, and will not be the eventual cause of death in most men. For more information on prostate cancer, see the topic Prostate Cancer.