



# Urethral strictures in men

A urethral stricture narrows the opening to the bladder.

## What does my bladder do?

(See *Diagram of bladder, prostate, anterior and posterior urethra*)

- Urine made in the kidneys is passed to the bladder (a hollow organ) through a ureter.
- The muscle in the outside layer of the bladder squeezes urine into the urethra (the opening in the bladder) when the bladder is full.
- Another muscle around the urethra (called the external urethral sphincter) opens and closes the urethra, so that you can hold back or stop your urine from flowing.

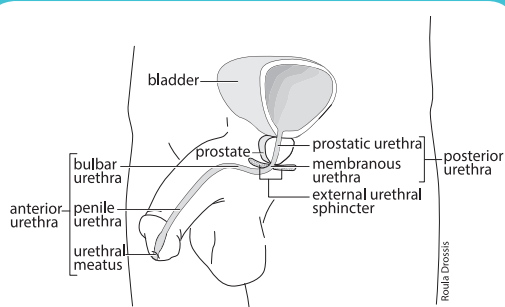
- Because men have a longer urethra, they are more likely to have a urethral stricture than women or children.
- Strictures don't often need major surgery.

## Where are urethral strictures found?

(See *Diagram of bladder, prostate, anterior and posterior urethra*)

- In males, the first 1" to 2" of the urethra is called the posterior urethra. Strictures that happen in here are called posterior strictures
- The final 9" to 10" of the urethra in males is called the anterior urethra. Strictures that are found here are called anterior strictures.

Diagram of bladder, prostate anterior and posterior urethra



## What is a urethral stricture?

- A urethral stricture is a scar in or around the urethra that can slow down the flow of urine. It is like a kink in a garden hose that slows down or stops the water.
- Urethral strictures often cause problems such as:
  - Reducing your stream of urine or causing it to spray
  - Causing pain during urination
  - Sometimes sending blood from the urethra

## What causes a urethral stricture?

- There could be a stricture anywhere in the urethra from the bladder to the opening.
- The most common cause of a stricture is an injury to the urethra.
  - A fall or car accident may cause a break in the bone of the pelvis, tearing the posterior urethra. This can create a stricture as it heals.
  - Landing on a bicycle crossbar between the legs (called a straddle injury), can crush the anterior urethra and cause a stricture.
  - An injury can happen from a catheter (drainage tube) put into the urethra or from the surgery carried out through the urethra.
- Sometimes infection may cause a urethral stricture.
- Many times, there is no known cause.

## How is a urethral stricture diagnosed?

- If a urethral stricture is suspected, your doctor may suggest tests to help make a diagnosis and figure out treatment.
- Urine tests can find signs of infection or blood in your urine.
  - The rate and quantity of urine flow can be recorded (called uroflowmetry).
- Imaging tests can be used to show the location, length, and severity of the stricture.
  - For an X-ray, dye is injected (called urethrogram) to show what the stricture looks like.
- Your doctor may prefer to pass a thin, lubricated “scope” (a small camera on a tube called a cystoscope) into the urethra in order to see the stricture (process called urethroscopy).



## How do you treat a urethral stricture?

- There are different types of treatment for urethral strictures depending upon the how long it is, where it is found and how much scar tissue there is.
  - Stretching the stricture little by little to make the channel larger (called Dilation - see section *What happens with dilation of a urethral stricture?*)
  - Cutting the stricture using a “scope” (called Internal urethrotomy – see section *What is an internal urethrotomy?*)
  - Removing the stricture and rebuilding the urethra with surgery (called Urethroplasty – see section *Is there surgery to help fix a urethral stricture?*).

## What happens with dilation of a urethral stricture?

- A urethral dilation can often be done in the office with a local anesthetic (“freezing”).
- The stricture is slowly stretched using a series of larger and larger dilators.
- If the stricture returns after a short period of time, you can learn to put a catheter into the urethra yourself. This helps to keep the opening wide.
- After dilation, you may feel pain, have bleeding, or get an infection.

## What is an internal urethrotomy?

- With internal urethrotomy, a specialized cutting tool or laser cuts into the scar causing the stricture.
- As with dilation, this may be done in a clinic with local anesthetic (freezing) or it may need to be done in hospital using a spinal or general anesthetic (you are “put to sleep”).
- Your doctor will use a urethroscope to clearly see the stricture.
- A catheter may be left in the urethra to let it heal in an open position.
- After the procedure you may see blood in your urine and bleeding from your urethra. You might find this uncomfortable at first.
- Sometimes, you may need antibiotics to treat an infection.

## What happens if an internal urethrotomy doesn't work for me?

- Unfortunately, there is a risk of a stricture returning after internal urethrotomy.
- If your urethral strictures come back often in spite of these non-surgical treatments, surgery (urethroplasty) may be a better choice compared to going through dilation or urethrotomy again.

## What kind of surgery is used to fix a urethral stricture? (Urethroplasty)

- Urethroplasty is surgery that cuts into the urethra to fix posterior or anterior strictures or urethral meatus strictures (See *Diagram of bladder, prostate, anterior and posterior urethra*).
- There are many different types of urethroplasties depending upon where the stricture is found and how long it is.
- When the stricture is short, surgery can remove the stricture and re-join the two ends (called Open urethroplasty).
  - Open urethroplasty is done through a cut in the crotch or the penis.
  - Usually, a general anesthetic is used for this surgery. You may either be an out-patient or have a short stay in hospital.
  - A small, soft catheter may be put into your penis for up to three weeks to make sure the repair heals properly.

Continued on next page

## What happens after treatment?

- Because urethral strictures can come back at any time, your doctor will watch you following surgery.
- You may need to learn to put in a catheter yourself (as with dilation) to delay or prevent a stricture from coming back.
- You may need to see your doctor every now and then to go over any problems with urinating and test the flow of your urine.
- From time to time, you may also need X-rays or urethroscopy to check out the area that was fixed.
- Over time, people may need to have more surgery.

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