

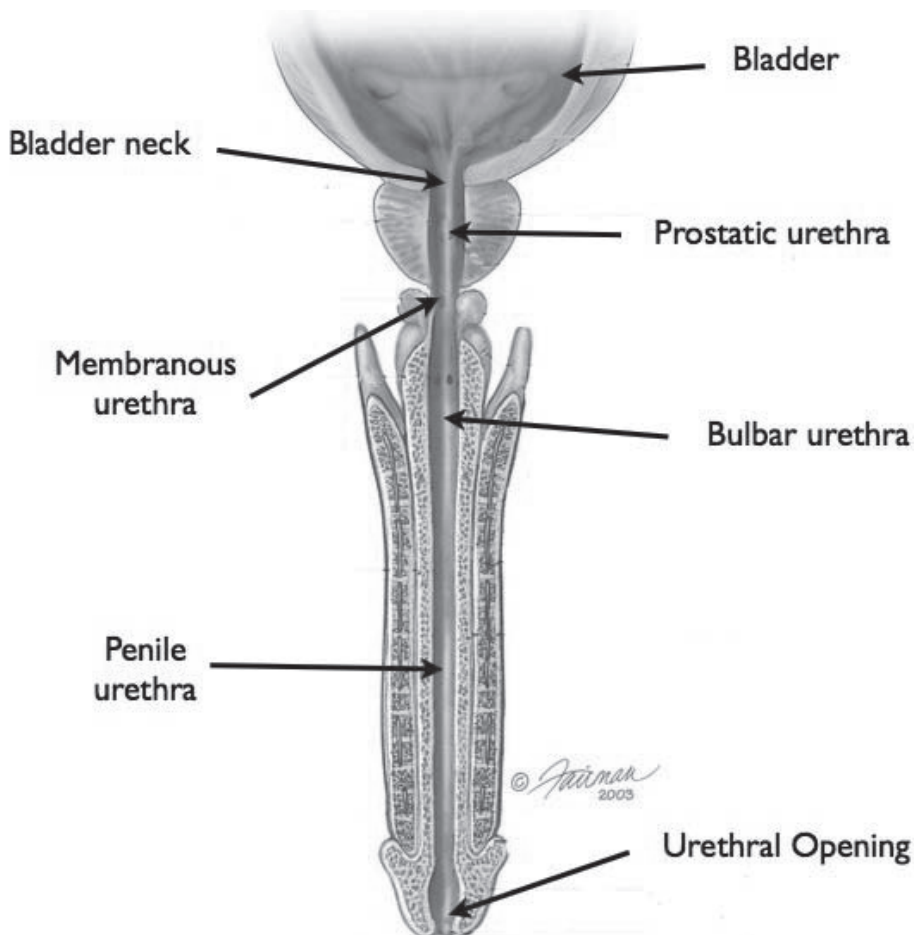


Can Urethral Strictures cause Prostatitis?

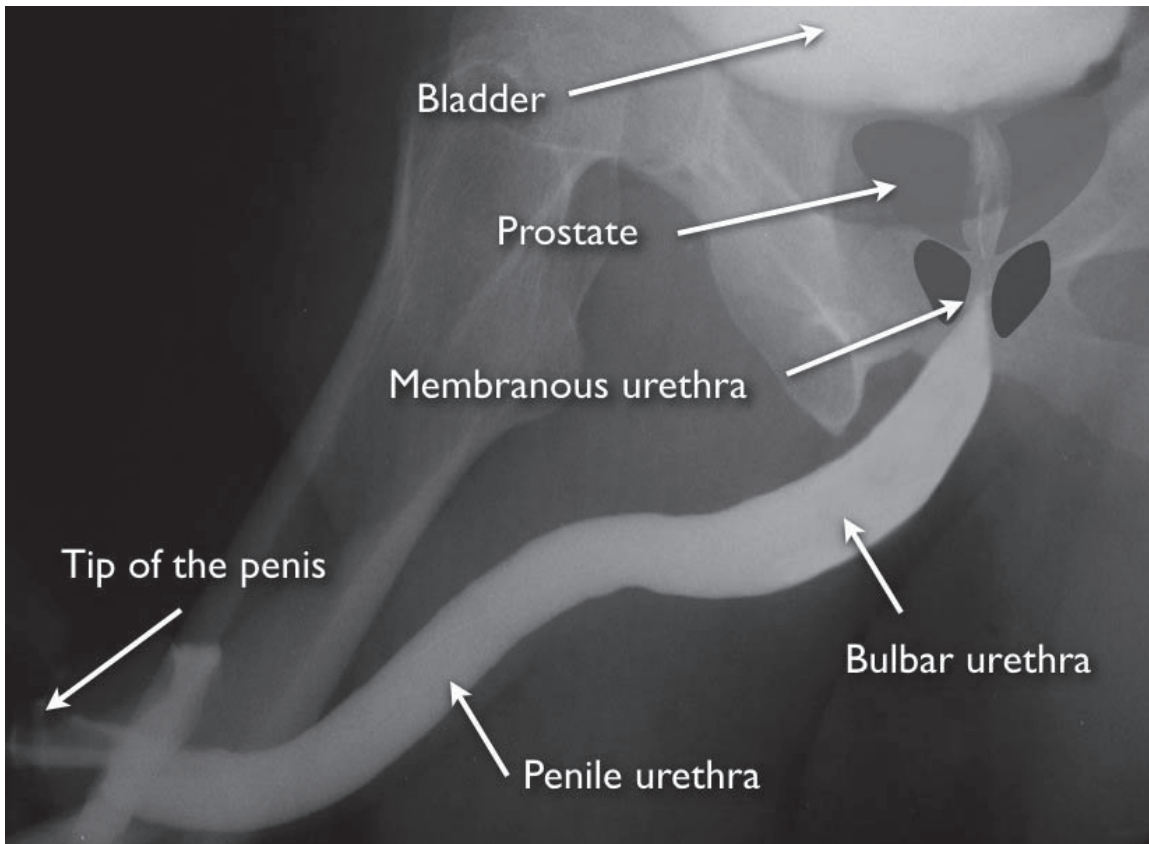
Yes! In addition, when prostatitis is caused by urethral stricture disease, effective treatment of the urethral stricture can cure prostatitis and prevent recurrence of the symptoms of prostatitis. This section provides information about the relationship of the prostate to the urethra, and explains why urethral strictures can cause prostatitis, how urethral strictures are treated, and why treatment of the stricture may prevent future prostate problems.

Anatomy of the Urethra and Prostate

This is the anatomy of the male urethra. The prostate surrounds the urethra between the bladder and the membranous urethra. The portion of the urethra that is within the prostate is called the prostatic urethra. The prostate is a gland that makes fluid that is secreted into the prostatic urethra through tiny openings (ducts) during ejaculation. **This is a one-way flow from the prostate into the urethra.**



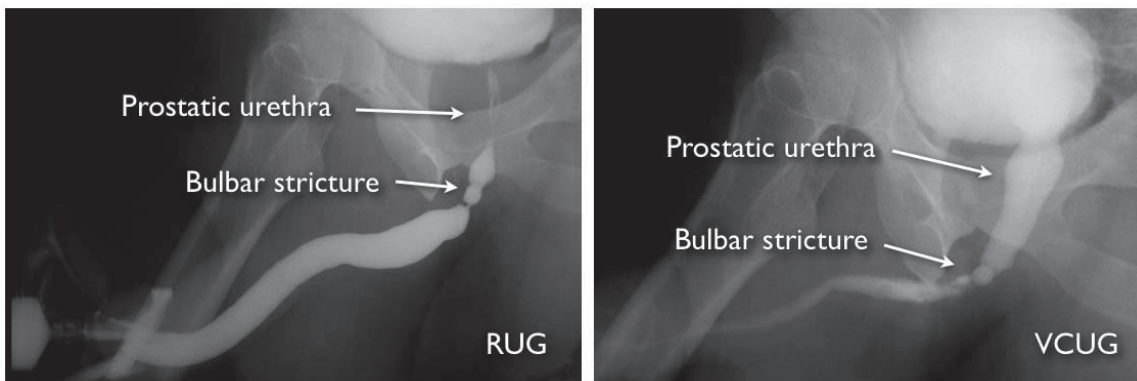
This is an X-ray obtained in a patient with a normal urethra. This test is called a retrograde urethrogram (RUG). X-ray contrast is instilled through the tip of the penis towards the bladder. As the contrast is injected, a film is obtained. The contrast is clear and looks like water, but is white on an X-ray.



The prostate and a sphincter that surrounds the membranous urethra (external sphincter) are not seen on a this X-ray, and are illustrated to show where they are located. The urethra in the area of the prostate and membranous urethra are normally pinched closed, and this is a good thing as it prevents incontinence. However, during urination, the prostatic and membranous urethra open as the bladder is squeezing (contracting) to empty.

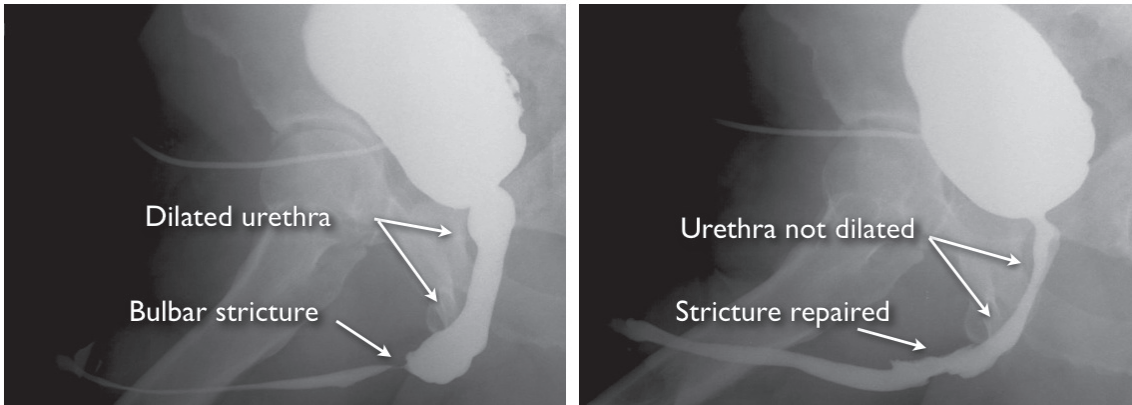
Urethral Strictures

The following is a retrograde urethrogram of a patient with a stricture of the bulbar urethra to the left, and a film obtained during urination (called a voiding cystourethrogram or VCUG) to the right. Notice that the urethra in the area of the prostate is closed when the patient is not urinating, and is wide open during urination. **Also note that the prostate gland is not seen and no contrast enters the prostate.**



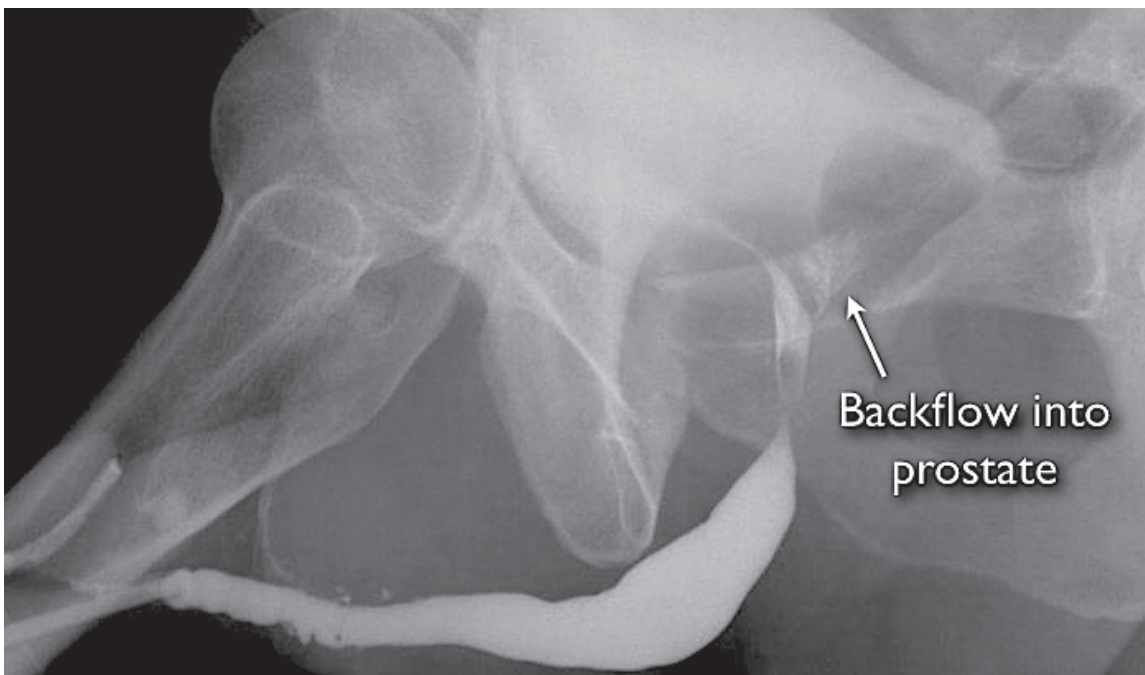
When there is a stricture “downstream” from the prostate in the bulbar or penile urethra, during urination, as the bladder has to squeeze harder to push the urine through the blocked urethra, the

pressure in the urethra prior to the blockage is increased. This high pressure can lead to pressure dilation of the prostatic urethra. This is shown in the following films before and after the repair of a bulbar urethral stricture. In the voiding film on the left, there is significant dilation of the urethra between the bladder and the stricture. After urethroplasty, a surgery to repair the urethra, the dilation is no longer present as there is no longer high pressure voiding.

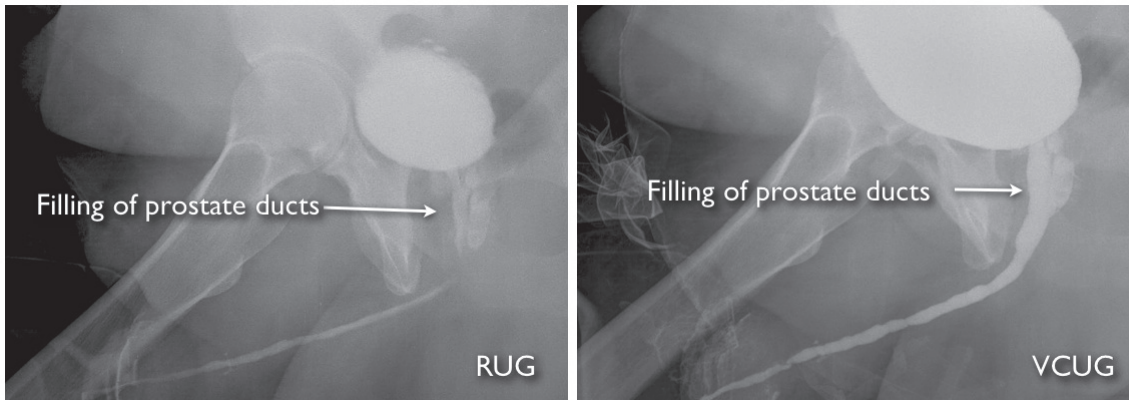


Urethral Strictures and Prostatitis

Some patients with urethral strictures report a long history of “prostatitis”, and are treated with multiple courses of antibiotics without complete resolution of their symptoms. In some cases, there is perhaps nothing wrong with the prostate and this represents a wrong diagnosis. Subsequently, a Urologist then places a small telescope in the urethra (called a cystoscope) and diagnoses of urethral stricture disease is made. **In other cases, the inflammation and/or infection of the prostate, called prostatitis, is caused by the stricture.** Although, as previously mentioned, there should only be travel of fluid from the prostate into the urethra during ejaculation, in patients with urethral stricture disease, the high pressure voiding can cause backflow of urine into the prostate causing inflammation and/or infection. The following is an image of a retrograde urethrogram in a patient who was diagnosed with prostatitis. As show, during the injection of contrast, there was an abnormal backflow of contrast into the prostate ducts.



The following is another example of a patient with urethral stricture disease, initially thought to have prostatitis.



Many patients with prostatitis do not have urethral stricture disease, and many patients with urethral strictures do not have prostatitis. The typical symptoms of a urethral stricture are a slow urine flow rate, straining to urinate, and prolonged urination. However, other patients also have pain with urination and develop recurrent infections, including infections of the prostate.

Urethral Stricture Diagnosis and Treatment

When symptoms may be related to urethral stricture disease, a Urologist can make or exclude the diagnosis by cystoscopy, the advancement of a flexible telescope through the urethra into the bladder. This is an office procedure that is performed using lidocaine jelly (numbing jelly) and sedation is not required. If a urethral stricture is diagnosed, then urethral imaging (RUG and VCUG) is indicated. The cystoscopy established the diagnosis of a stricture, but does not define the length or location of the stricture, and the imaging then provides needed additional information.

Urethral stricture disease is treated surgically, and there is no effective medical management. Observation is not a good option because the obstruction of urine flow caused by a stricture of the urethra can lead to many preventable complications, including bladder and kidney damage. The treatment options include:

Dilation of the urethra. This is an office procedure to stretch the urethra. This can potentially be curative when used to treat short strictures, but often only provides temporary relief of symptoms.

Direct vision internal urethrotomy (DVIU). This is an outpatient surgery. A telescope is advanced into the urethra and under direct vision, a knife or laser fiber is used to incise the stricture. This procedure, like dilation, may be curative when used to treat short strictures, but the recurrence rate is high.

Urethral Stent. This is a metallic device that is placed internally across the stricture to stent the urethra open. This device has fallen out of favor as the stricture recurrence rate is high, and when there is a recurrence, the treatment is very complex.

Open Urethroplasty. This is an operation to repair the urethra. When the urethral stricture is short, the urethra is mobilized, the narrow area is excised, and the healthy ends are sutured back together. When the stricture is longer, tissues (such as tissue from inside the cheek called a buccal mucosa graft) can be used as a patch to widen the narrow portion of the urethra. Many patients with strictures

are inappropriately managed with multiple dilations and incisions without being informed about the choice of urethroplasty. However, when there is a recurrence of a stricture after a single dilation or internal urethrotomy or if the stricture is longer than 2 cm, open urethroplasty is the standard of care. This surgery has a success rate of 90-98+%, but only when performed by a specialist with expertise in this surgery.

Urethral Stricture Treatment and Prostatitis

When there is urethral stricture disease and prostatitis, the best approach is to treat the stricture. When the blockage is relieved, this will decrease the pressure within the prostatic urethra during urination and may prevent recurrence of prostatitis. In addition, stricture treatment will prevent other complications of obstruction including bladder and kidney damage. **Although prostatitis can be a chronic condition, when prostatitis is caused by a urethral stricture, effective treatment of the stricture can be associated with a complete resolution of symptoms.** See:

<http://www.centerforreconstructiveurology.org/urethralstricture>

Write and email your congressional representative and senators, now! Things have changed in Washington, DC Many offices have completely changed personnel. The previous ones who were there may have different committee assignments. It is time we reconnected with these people who can help continue funding for research to find a cause and the cure for prostatitis. A single letter that reaches the right person can have a huge effect on our chances of seeing this ongoing research continue until it is successful. This is no time to relax our research efforts after all the expense and data gathering the National Institute of Health has done so far. Tell them how much you have suffered and how it affected your family life. Enlist family and friends to also write their senators and congressional representatives.

The Prostatitis Foundation thanks Farr Labs LLC. for their support of this newsletter and our webpage. They are the makers of ProstaQ for Chronic Prostatitis. For more information visit ProstaQ.com or call 877-284-3976.

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