



The **Thrive Beyond Passive Restoration Roadmap**

One size does NOT fit all. At Urology Austin, we understand and appreciate that. Just because a man may not have the ability to stick with the Active Restoration Roadmap, doesn't mean he doesn't want to work to preserve his erectile and urinary function. That's why we developed the Thrive Beyond Passive Restoration Roadmap.

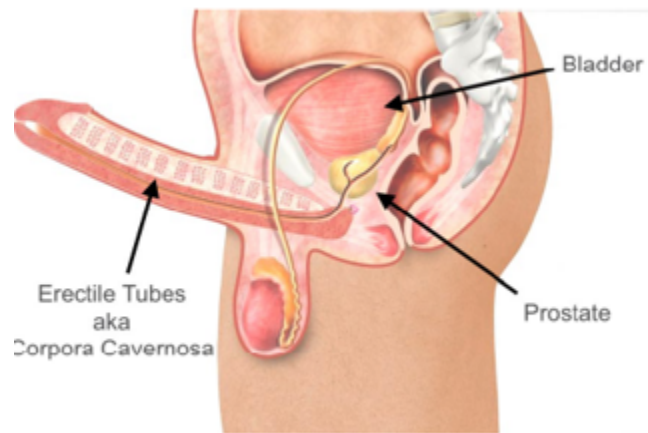
The Passive Restoration Roadmap consists of two key interventions that men can use to help preserve what's important to them: a daily dose of the medication tadalafil (also known as Cialis) and daily Kegel exercises. Combined with follow-up at Urology Austin starting three months after surgery or radiation, the Passive Restoration Roadmap allows men the chance to preserve and restore their quality of life with a recovery plan that fits them.

This information is presented in a question-and-answer format.

Erectile Preservation

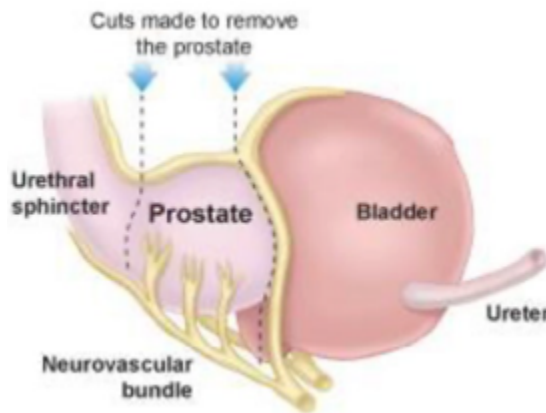
How do erections work?

In regard to sexual function, the male erection is essentially the result of two inflatable tubes that start in the pelvis and extend down the length of the penis. These tubes are known as the corpora cavernosa. When a man is aroused, an electrical signal travels from the brain, through the deep nerves of the pelvis, to the arteries that supply these inflatable tubes. These arteries then expand and allow the rush of blood that provides an erection.



How does pelvic surgery or radiation affect erections?

The nerves that supply erection are densely attached to the prostate. Completely removing them or treating them with radiation disrupts the pro-erectile electrical signal that comes from the brain, preventing erections. As a result, many men now undergo what are known as 'nerve-sparing' procedures if their anatomy allows it. With this approach, these nerves are gently separated from the prostate, which improves men's chances of recovering sexual function. However, even if these nerves are spared, men will still experience a temporary 'paralysis' of these nerves that can take several months to resolve. This does not affect sensation, but it will prevent men from achieving erections immediately following surgery. This presents a challenge.



The soft, spongy tissue inside the erection tubes requires significant blood flow to stay healthy. Practically, this is provided by the 3-4 erections most men achieve while sleeping or upon waking up. These daily erections go away when a man undergoes pelvic surgery. Even if a man's nerves are spared and are only temporarily 'paralyzed', this lack of regular blood flow can cause significant scarring inside the erectile tubes. Ultimately, this leads to a loss of penile length, a loss of penile girth, and ultimately worse erectile function even if a man's pelvic nerves eventually recover from surgery.

Although this tissue is best exercised and preserved with the penile rehabilitation that's part of the Thrive Beyond Active Restoration Roadmap, the truth is every little bit helps. This is why we recommend the daily dose of tadalafil (detailed below) that is proven to improve blood flow to the erection tubes of the penis.

Does prostate removal or radiation affect ejaculation?

During climax, several processes occur simultaneously. Orgasm is the pleasurable sensation, while ejaculation is the pelvic contractions and expulsion of semen. Removing the prostate means orgasm is still pleasurable, and men will still experience pelvic contractions with climax however no fluid (*or much less fluid of a different consistency or small amount of urine*) will come out of the tip of the penis.

Sexual Activity During Radiation Therapy

You can be as sexually active as you like during radiation therapy. You will not spread cancer or spread radiation.

For men on Androgen Deprivation Therapy (ADT) who have zero sex drive, it's okay not to be interested in sex like you were in the past. We are helping you get ready for when your testosterone returns.

What is the medication tadalafil (also known as Cialis)?

Tadalafil (the generic name for Cialis) is a medication known as a 'phosphodiesterase inhibitor'. It is typically prescribed to men with mild erectile dysfunction to boost the chemical pro-erectile signals in the penis. This can allow men with mild erectile dysfunction to achieve erections by improving blood flow to the penis.

In the context of penile rehabilitation, the prescribed daily dose of tadalafil is unlikely to cause regular erections immediately following surgery. Rather, it promotes blood flow to the erectile tissues which can help reduce scarring and shrinkage as the pelvic nerves recover. It should be taken every day leading up to and following surgery, regardless of whether or not sexual activity is desired.

Although tadalafil is incredibly safe, it should NOT be taken by men who are also taking 'nitrate' containing medications. Some examples of these include nitroglycerine tablets, isosorbide mononitrate, and nitroglycerine patches. If you're unsure if you're taking one of these medications, please call our office at 512-788-9688 and request to talk with your doctor's triage team so you can review your medication list before you start taking this medication.

Depending on your insurance, your pharmacy may state that a 'prior authorization' is required prior to filling your prescription. Our office does NOT submit prior authorizations for this medication. If your pharmacy tells you this, we recommend that you download the smartphone app 'GoodRx' (www.goodrx.com) and use the provided coupon for an affordable cash price.

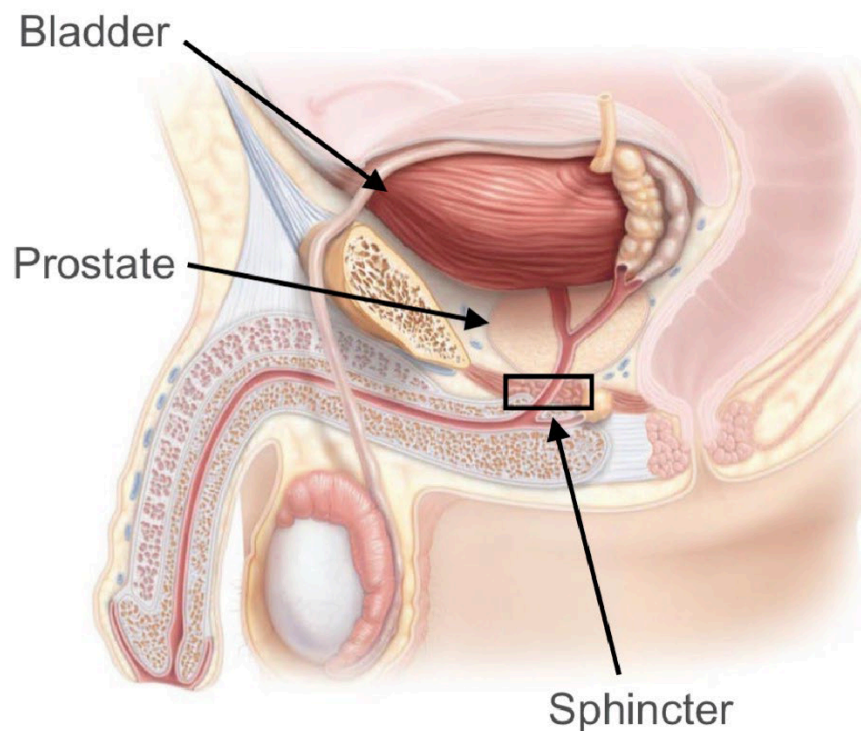
Typically, we recommend that men start taking their daily tadalafil script as soon as two weeks prior to surgery or radiation. Please remember that this medication must be prescribed by your cancer surgeon or radiation oncologist since men in the Passive Restoration Roadmap program do not have a separate pre-operative rehabilitation appointment at Urology Austin.

Bladder and Urine Control Preservation

How does bladder control work and how does prostate surgery affect it?

Bladder control, also known as continence, is the ability to hold urine without leaking. This is mostly controlled by a small muscle known as the urinary sphincter. This muscle wraps around the urine tube, known as the urethra, and squeezes it shut, preventing urine leakage.

The sphincter is very close to the prostate and, as such, can be stressed when the prostate is removed or radiated. In addition, the prostate itself helps with urine control. As a result, most men will experience some degree of bladder leakage following prostate removal as the sphincter recovers from surgery and works to control urine flow by itself as the prostate is no longer there to help it.



How can we promote early recovery of bladder and urine control?

The sphincter is a muscle and, like other muscles, gets stronger with regular exercise. The ideal exercises that can help with the recovery of urine control are known as Kegel exercises. These are a type of pelvic contraction that work the sphincter and other pelvic muscles that assist with bladder control. Here's a step-by-step regimen for performing Kegel exercises:

1. Locate your pelvic muscles. Pretend you are trying to avoid passing gas or, when urinating, try to stop your urine stream. If you've identified the right muscles, you'll feel the contraction more in the back of the pelvic area than the front.

2. Choose your position. Start by lying on your back until you get the feel of contracting the pelvic floor muscles. When you have the hang of it, practice while sitting and standing.
3. Work on contracting while relaxing your other muscles. Contract your pelvic floor muscles for 3-5 seconds. Relax for 3-5 seconds. Repeat the contract/relax cycle 10 times. Don't contract your abdominal, leg, or buttock muscles, or lift your pelvis. Place a hand gently on your belly to detect unwanted abdominal action.
4. Extend the time. Gradually increase the length of contractions and relaxations. Work your way up to 10-second contractions and relaxations.
5. Aim high. Try to do at least 30 to 40 Kegel exercises every day. Spreading them throughout the day is better than doing them all at once. Since these are stealth exercises that nobody notices except you, try to sneak in a few when waiting at a stoplight, riding an elevator, or standing in a grocery line.
6. Diversify. Practice short, 2 to 3 second contractions and releases (sometimes called "quick flicks") as well as longer ones.
7. Kegel exercises in an emergency. After surgery, if you leak urine when you cough, sneeze, laugh, bend over or lift something heavy (known as stress incontinence), doing one or more Kegels before a 'trigger' may be enough to prevent any leakage. If you have the urge to urinate and doubt you are going to make it to the toilet, doing Kegels may get you safely to a restroom.

As with the daily tadalafil, we recommend that men start practicing their Kegel exercises as soon as 2 weeks prior to surgery and resume them once more after their catheter has been removed.

Conclusion

That's everything you need to know about the two key interventions essential to the Thrive Beyond Passive Restoration Roadmap. If you have any questions throughout your recovery period, please call Urology Austin at 512-788-9688 to make an appointment.

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