

## PENILE LENGTH POST SURGICAL REMOVAL OF OR RADIATION TO THE PROSTATE

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Disclaimer: Please recognize that I am not a Medical Doctor. I have been an avid student researching and studying prostate cancer as a survivor and continuing patient since 1992. I have dedicated my retirement years to continued research and study in order to serve as an advocate for prostate cancer awareness, and, from a activist patient's viewpoint, to help patients, caregivers, and others interested develop an understanding of prostate cancer, its treatment options, and the treatment of the side effects that often accompany treatment. Readers of this paper must understand that the comments or recommendations I make are not intended to be the procedure to blindly follow; rather, they are to be reviewed as my opinion, then used for further personal research, study, and subsequent discussion with the medical professional/physician providing prostate cancer care.

The issue of penile length after surgery has been debated many times in the past.

There is a continuing misconception that when the prostate gland is removed the penis is shortened. Most men have no idea that the penis, though having the urethra traverse through it to release urine from the bladder, has no connection to the prostate gland. Half the length of the penis is inside the body, tucked up inside the pelvis and attached by ligaments to the pubic bone, so removal of the gland has absolutely no effect on shortening the length of the penis.

With the absence of the prostate, the bladder drops down somewhat into the void of the absent prostate gland, probably as the result of the anastomosis reattachment of the bladder neck to the remaining prostatic urethra not removed with the gland. Too often with this reattachment of the remaining prostatic urethra to the bladder neck there is a miss conception this has caused shortening of the length of the penis, but since the penis external of the pubic bone cannot be pulled in past the pubic bone, it is not. There is no question the penis may shrink/shrivel in size as a trauma effect (nerve/blood vessel damage) of surgery, and if exercises/rehabilitation are not begun before and continue after surgery, atrophy can occur to continue that penile "shrink."

Though there may be a reduction in length because of the initial trauma of surgical removal of the prostate gland, this is only a temporary loss unless the patient ignores penile rehabilitation. The adage “Use it or Lose it” applies.

It is important that men realize that daily low doses of phosphodiesterase type 5 (PDE-5) inhibitors (Viagra/sildenafil, Levitra/vardenafil, Cialis/tadalafil, Stendra/avanafil), as well as injectible mixtures of combinations of Prostaglandin, Papaverine, or Phentolamine, will provide oxygenation of cavernosal tissues and enhanced arterial blood flow necessary for penile rehabilitation. Use of a Vacuum Erection Device (VED), though not providing penile rehabilitation since the blood drawn into the penis is venous blood, can promote penile stretching so that pre-treatment penile size may be preserved. Putting off this penile rehabilitation results in penile atrophy (shrinkage of length and girth).

Radiation can have a similar effect of penile shortening since the radiation can cause scarring and thickening of the penile artery resulting in a reduction of arterial blood flow as well as lack of oxygenation. The measures of rehabilitation explained in the previous paragraph hold true in this case, as well.

It is very important that men discuss with their treating physician penile rehabilitation following or during any form of treatment in order to insure the practices described above become a separate protocol of treatment for earlier return of any temporary loss of penile length as well as improvement in erectile function.

Most health insurers will cover their expense allowance for PDE5 inhibitors for whatever number prescribed by the treating physician IF the treating physician provides a letter to the health insurer explaining that the increased use is necessary for penile rehabilitation following treatment for prostate cancer.

Please take the time to review the following regarding penile length:

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Self-perceived penile shortening after radical prostatectomy

<http://reference.medscape.com/medline/abstract/22573233>

(You can register free with MedScape to read any of their reports – Please take special note of the repeated “**self-perceived** penile shortening” used in this report – in other words “self-perceived” but not actually having occurred)

The natural history of penile length after radical prostatectomy: a long-term prospective study.

<http://www.ncbi.nlm.nih.gov/pubmed/23102441>

Conclusion: Nearly 1 cm of penile shortening after RP may be expected up to 12 months. However, a trend toward recovery of penile length occurs after 24 months of follow-up and is completely re-established after 48 months. The preserved erectile function after RP is a predictor for penile length recovery.

<http://www.ncbi.nlm.nih.gov/pubmed/21114411>

Conclusion: This report describes changes in SPL (stretched penile length) over time after RALRP (robot assisted laparoscopic radical prostatectomy) for prostate cancer. The expected decrease in length was observed shortly after surgery, but, by 9 months, penile length had returned to the preoperative measurement.

<http://www.ncbi.nlm.nih.gov/pubmed/21699669>

Conclusion s: The administration of luteinizing hormone-releasing hormone (LHRH) agonists induced significant decreases in penile length for only up to 15 months in the absence of the confounding effects of surgery and radiation.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2645881/>

Conclusion: Evolving data from human volunteer studies and animal models support the basic pathophysiological effects of prostate cancer surgery–induced ED as being largely a consequence of increased cavernosal smooth muscle atrophy and fibrosis. Although few preventative strategies have been identified as feasible, clear evidence supporting the importance of an experienced surgeon able to preserve the cavernous nerves, limit the injury from cautery and minimize neural traction in improved rates of erection preservation. Additionally, evidence showing reduced intrapenile fibrosis, smooth muscle loss and improved erectile functioning among patients exposed to intracavernous vasoactive injections and/or PDE5 inhibitors is supported by the bulk of the data in clinical and animal reports. The decision on whether to initiate a rehabilitation program on an individual patient should be based on patients' goals and a complete understanding of the strengths and weaknesses of the existing scientific data.