

Post-operative Erections and Radical Retropubic Prostatectomy

Erectile dysfunction is one of the most frightening aspects of Prostate Cancer that men have to deal with. A man's erectile function can be changed from radiation treatments, hormonal treatments and surgical treatments used to treat or control prostate cancer. The change in erectile function can vary from gradual decrease in erections to the sudden and permanent loss of natural erections for life. However, even with the most drastic loss of erections, erectile function can be treated successfully with options ranging from medications to operations.

The first step in erectile function and Prostate Cancer is to **realistically assess your erectile status and sex life**. How strong are your erections and how often do you have sex? Your erections have to be weighed against the risks of your prostate cancer. As one patient put it, "Doc, my erections will not do me any good in a box buried in the ground". If you only achieve partial erections and are not sexually active, it may not be important to try to save erections. If you have great erections and are very active, erectile function may be more important to you than the treatment of the cancer. You need to realistically assess your sex life with your partner and then tell your doctor what is important to you. Remember, saving nerves for erections could mean leaving cancer behind.

Hormonal therapy with LHRH agonists like Lupron, Zoladex or Viadur and antiandrogens like Casodex or Flutamide will drop your testosterone levels to treat your Prostate Cancer. This will decrease your libido (sexual desire) and decrease erections. Radiation therapy may gradually decrease erections over time. Radiation may change the vascular supply and nerve supply to the penis and cause "premature aging" of your sexual ability. Surgery for prostate cancer can affect both the nerve and blood supply to the penis. Surgical techniques to minimize changes to these structures can be performed, but at times, saving these structures may compromise removing the entire cancer.

Surgical treatment for prostate cancer can be performed with "nerve sparing techniques" that can save erectile function while removing the prostate. Most surgeons will perform surgery with three goals all listed in order of importance: **first remove the cancer, second maintain urinary continence, and third save erectile function**. We know that erectile function decreases with age and therefore nerve sparing surgical results are better in a 45 year old vs a 75 year of patient. Surgical results on erectile function vary according to a patient's age, preoperative sexual function, the amount of cancer present, the patient's anatomy (where the nerves and cancer are located) and the surgeon's experience. In a large series review, erectile function was saved as below when stratified for the patient's age.

<u>Radical Retropubic Prostatectomy</u>			
<u>Age (yrs)</u>	<u>Wash U</u>	<u>JHH</u>	<u>Average</u>
< 50	86	91	88
50-60	80	75	77
60-70	60	58	59
> 70	42	25	33

The nerves that control erections are damaged to some extent during all prostate surgery, and it may take 2-24 months for erectile function to return. Patients who are proactive in the sexual rehabilitation postoperatively achieve better results than passively waiting for the return of sexual function.

Postoperatively, a patient who has undergone Radical Retropubic Prostatectomy can do several things to enhance the ability of his erections to return:

- 1. Take control of your general health.** Stop smoking, drink alcohol only moderately, control your diet/weight, control your blood pressure, control your sugar, exercise regularly and get adequate sleep.
- 2. Be patient and do not get frustrated** if you are unable to achieve an erection that allows intercourse. You and your partner should stay intimate with non-intercourse related sexual activity. **Regular, non-pressured intimacy should be the rule.**
- 3. Regularly take a PDE-5 inhibitor** (Viagra, Vardenafil or Cialis) at night. Studies have shown that radical prostatectomy patients on these medications postoperatively have a higher rate of return of erections. These medicines stimulate the return of blood flow to the nerves even when taken without consequent sexual activity. **Take a full dose (or half dose if you get side effects) of one of these medicines at bedtime at least three times a week postoperatively- with or without sexual activity.** Again, you are taking these medicines to help erections return and do not expect them to give full erections initially. Be patient and continue these meds the first year post op.
- 4. Use a vacuum erection device regularly without the use of the constricting band.** Studies have shown that using the vacuum device for 10-20 minutes daily or every other day (pump up the device and leave it in place without placing the band) will enhance the return of sexual function. You can use the device with the band also for sexual activity, but this is not to take the place of the regular, non-banded use of the device.
- 5. Use intrapenile injections or transurethral insertion of alprostadil regularly to stimulate erection return.** This medicine use increases blood flow and probably enhances nerve return. The use of these medications are not necessary if the oral medications and the pump work sufficiently for you or if you have a needle phobia.

If you and your partner are patient and proactive postoperatively, you should be able to resume a regular sex life after prostatectomy. Sexual activity may be different, but a healthy and fulfilling sex life can be achieved if you and your partner are willing to work at it both mentally and physically. Talk with your doctor about your sexual function both preoperatively and postoperatively and more importantly; talk with your partner about this as their involvement in this rehabilitation process is of the utmost importance. If rehabilitation methods are not working, your doctor can modify the rehabilitation plan and find something that works satisfactorily for you and your partner.

If you are beyond the one to two year period post-operatively from your prostatectomy and still have no spontaneous erections with or without Viagra-like drugs, your surgeon can still work with you to get your sex life restarted with various methods of treatment. Talk with him about your treatment options.