Restoring sexual function in prostate cancer patients: an innovative approach

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It has been extremely difficult for men with prostate cancer to obtain reasonable estimates of the likelihood of remaining potent after first line therapy, partly because of differences in defining potency. If, as in more recent studies, the definition requires that men are usually (not just occasionally) able to get and sustain an erection, then the picture is not encouraging. Additional strategies are needed to help men sustain sexual activity. In this paper we draw on the experiences of a rather remarkable prostate cancer patient to help consider the possibilities for a different kind of intervention for men with ED – use of a strap-on dildo (an external prosthetic penis fastened by a harness around the hips). The dildo is a simple and inexpensive strategy for dealing with impotence and in certain circumstances it can work better than more established medical treatments for ED. Use of a dildo potentially removes the fear of erectile failure, allows for increased stimulation of the glans, facilitates full-body contact between partners, and offers potential satisfaction to one's partner. Urologists (and other health professionals) are encouraged to explore dildos as an option during discussions with patients about sexual rehabilitation. The potential benefits are discussed of specialty sexuality clinics that facilitate introduction of innovative approaches like dildos.

Key Words: prostate cancer, erectile dysfunction, male sexuality, sex aids

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Introduction

It has been extremely difficult for men with prostate cancer (PCa) to obtain reasonable estimates of the likelihood of remaining potent after first line therapy. Estimates for potency after radical prostatectomy have varied from 14% to 82%; for radiotherapy from 2% to 86%, with the majority of studies arguably

overestimating the success of both surgery and radiotherapy in preserving sexual function.[1] While there are several possible reasons for diversity in findings, probably the key one has been how potency has been variously measured or determined. If, as in more recent studies,[1,2] the definition of potency requires that men are usually (not just occasionally) able to get and sustain an erection, then the picture is not encouraging. In a sample of more than 5000 PCa patients, excluding those using medications or technical aids, Cooperberg et al,[2] found that 27.4% could get erections at least 50% of the time when they wanted to and/or had intercourse at least once in the past month. However, even among the men rated potent, there was wide variation in sexual function scores, suggesting that dysfunction existed among many of the men able to have intercourse. In another study of 1236 men, at average 4.3 years post-treatment, only 13% reported having reliable, firm erections spontaneously.[1] Within the prior 6 months, 85% reported having erectile dysfunction (ED), 45% reported low sexual desire, and 65% a problem with their orgasms.

In the clinical setting, health professionals often reassure men considering options for prostate cancer treatment that there are interventions that will help in the event that they are rendered impotent. But these interventions have rarely been thoroughly investigated, and are often oversold to patients. Schover et al[3] found that only 38% of the prostate cancer patients who used one or more medical treatments to help with ED found them at least somewhat helpful. Those on anti-androgen therapy were significantly less likely to find interventions helpful. Interestingly, the most invasive approaches (e.g. inflatable penile prostheses, penile injections) - which men are less likely to want to try - were rated as more helpful than less invasive approaches (e.g. Viagra, vacuum constriction devices). In a companion study, the most commonly cited barrier to men's seeking help for sexual dysfunction was "lack of an effective noninvasive treatment".[4]

The effect of unresolved ED on men is often substantial. In both Schover's survey study[3] and Cooperberg's study,[2] about 2/3 of men with ED indicated distress about their situation. Patients using erectile aids have been found to have higher "bother" scores than those not intervening to affect their ED.[5] The impact of ED on men is likely underestimated by survey methodology, as this approach serves to minimize reporting of distress, especially among men.[6] Recent qualitative research studies provide more in-depth profiles of men's experiences, including the various ways that they work to mask loss and despair about sexuality in order to be able to provide publicly acceptable responses to their dilemma.[7,8] Men are particularly likely to minimize the impact of disease and treatment in social situations, using silence, deflection and/or humor to avoid appearing vulnerable or weak.

In this paper we draw on the experiences of a rather remarkable prostate cancer patient to help consider the possibilities for a different kind of intervention for men with ED – use of a strap-on dildo (an external prosthetic penis fastened by a harness around the hips). We believe there is reason to explore the potential for dildos because they may prove superior to more conventional sexual rehabilitation treatments for some patients.

In our case study we also include description of the patients' sensory experience of orgasms. Koeman et al[9] and others before them have discussed the "dry" orgasms of patients without prostate glands. However a PubMed search on this topic revealed no literature fully describing the sensual experience of orgasms in post-prostatectomy, impotent patients on LH-RH agonists.

Case study

This account is published with the permission of an advanced prostate cancer patient, who at the age of 52 was diagnosed with adenocarcinoma of the prostate, with a basal PSA of 19 and positive biopsy (Gleason 7). He had a non-nerve sparing retropubic prostatectomy (RPP). Since his PSA never reached an undetectable limit post-prostatectomy, the surgery was followed some 6 months later by a course of salvage radiotherapy (RT). However his PSA still failed to reach undetectable and continued to rise. Consequently within a year he started on a course of androgen deprivation (AD) therapy involving Lupron (leuprolide acetate) plus Casodex (bicalutimide).

At the time of this story, he had been on AD for 1.5 years and his PSA was holding at <0.04 ng/ml. His testosterone was at castration level. He reported being distressed from his initial impotence (sequelae to RPP and RT) and then from having libido suppressed by AD therapy. To address his sexual dysfunction, he had previously attempted to use both Viagra (sidenafil citrate) and a vacuum erection device. Neither strategy was effective. The patient's experimentation with a strap-on dildo has proven successful.

A female friend of the patient, aware of his health problems and sexual frustration, suggested trying a strap-on dildo. The patient was skeptical, imagining

that sex performed with such an appliance would be contrived and non-sensual. But his friend persisted, arguing that some lesbian couples obtain sexual satisfaction from using a dildo and that he and his partner might also.

It took the patient more than a year to act on his friend's suggestion. He was too embarrassed to go into a sex shop to buy a dildo. He had never before shopped for or used "sex toys." He was also afraid that he would feel foolish and humiliated by using a strap-on penis. He discussed with his partner whether she might be willing to have sex with him wearing a strap-on dildo. She was at first hesitant, but ultimately supportive of this exploration. Her encouragement made it possible for the patient to finally visit a sex shop and purchase a dildo.

While he eventually agreed to experiment with a strap-on dildo, the patient's expectations were muted, expecting that at most he might be able to please his partner. He was pleasantly surprised when, on using the dildo, intercourse felt natural. In the traditional missionary position, his hip movements felt the same as during normal intercourse. He described how during intercourse, his partner reached down and held his penis in her lubricated hand. In this position, she stimulated his penis in synchrony with his pelvic movements, so that experientially there was little difference from the sensation of intercourse before prostate cancer treatment. On the initial occasion, and at other subsequent times, he carried the act through to orgasm. He reported that the use of the dildo was also sexually satisfying for his partner. Whereas she had not previously been able to achieve an orgasm by simple penile penetration, the patient's use of the dildo allowed him to continue pelvic thrusts long enough for her to reach orgasm.

The patient described how his orgasms now differed from those experienced before prostate cancer. They radiated across his pelvis, sometimes all the way out to the hip joints. The orgasms were of variable intensity, described as sometimes massively cathartic and often multiple. The multiple orgasms were usually two or three, all occurring within a minute or two. We do not see a necessary link between the patient's multiple orgasms and his use of a dildo. With his prostate surgically removed, orgasms need not be shaped by the experience of ejaculation, thereby opening the door to the possibility of multiple orgasms. While our patient was delighted about his orgasms, he acknowledged that they were only achieved with difficulty and at the razor's edge of pain. He and his partner used lubrication to minimize this effect.

Discussion

Our patient's account suggests that genuine sexual satisfaction may be achieved through use of a dildo after treatments that leave men impotent and with reduced libido. To achieve that satisfaction, however, suggests an acceptance of a counter-intuitive approach to sexual intercourse; i.e., an acceptance of non-coital sex and the use of sex "toys." We acknowledge that many men and their partners may be initially put off by the idea of the dildo, given associations with non-mainstream sexual practices. It clearly would take some courage for many couples to go this route and they might need to be encouraged by health professionals that such exploration is warranted, and acceptable, as part of a sexual rehabilitation plan.

At first look, using a strap-on dildo must seem like a poor distant match to natural penile copulation. Indeed, our patient expected the experience to be far less than the "real thing" and was surprised by how natural and rewarding coitus was with this appliance. Paradoxically, for simple mechanical reasons a strap-on dildo has advantages over other treatments for ED, which focus on achieving an erection for vaginal penetration, such as vacuum devices, penile implants, and sidenafil citrate.

Vacuum devices and penile implants distend the shaft of the penis, but do nothing to enlarge the crura, which form the root of the penis and make up a third of the penis's length when erect.[10] Consequently, even if the shaft is fully distended, without engorgement of the crura, the penis can not sustain itself at the natural angle achieved when all cavernous tissues, including the root, are rigid. This leads to the "hinge" effect, where the shaft is stiff, but freely bends up and down at its base. Drug treatments, such as sidenafil citrate — unless they are 100% effective—leave the penis only semi-firm. When the erect penis is neither held at a natural angle nor fully firm, coitus is easily interrupted.

Thus conventional mechanical and pharmaceutical treatments for ED may allow the penis to penetrate the vagina (described as a "stuffable" penis on various internet discussion groups for PCa patients and their partners); however it is difficult with an imperfectly erect penis to maintain penetration during normal copulatory movements. This leads to undesired cessation of coitus, which is common to these treatments, and can be extremely frustrating for both the man and his partner.

A dildo, such as the one used by our patient, circumvents this problem. In the harness, a dildo can match relatively closely the natural size, shape, and

angle of the erect penis of a man. This allows him to make completely natural hip thrusts. Even though he cannot feel the dildo within his partner, he can move his hips and torso completely naturally without any fear of losing erection or coming out of the vagina.

Another reason why dildos may prove superior to conventional treatments for erectile dysfunction for some couples is that there is the potential for greater stimulation to the glans. Many men after surgery, radiation, and hormonal therapy report that they need extra stimulation to the glans penis to achieve an orgasm. But current treatments for ED focus on vaginal penetration rather than glans stimulation, and, because of the hinge effect, there can actually be less rather than more stimulation. In contrast, use of a strap-on dildo, where the penis is external to the prosthesis, allows a partner to stimulate the glans manually during intercourse, with potentially more pressure than could be obtained within the partner's vagina, and thus an increased likelihood of orgasm. It should be noted, however, that some partners may not have the physical flexibility to reach down and stimulate the man during intercourse, and some will undoubtedly not wish to engage in such activity even if they are able. It would also be presumptuous to expect that all men who are manually stimulated while using a dildo would be able to have orgasms. Sexual functioning is never that predictable. For example, some men may become preoccupied with the device to the degree that it inhibits the orgasmic reflex.

When traditional ED treatments are not perfect, they can undermine a man's confidence in his ability to providing sexual satisfaction to his partner. The acceptance of a dildo may circumvent this psychological problem, for both man and partner can be fully confident that the dildo will remain erect. Also important is that use of the dildo facilitates intercourse in the traditional missionary position (although not just this position), allowing full body contact that some couples may miss if using alternative sexual practices and positions.

The patient in our case study reported that his partner had satisfying sexual experiences, made possible by the more sustained and intense vaginal stimulation provided by the dildo. Again, such an outcome cannot be assumed. Many women may initially find the use of a prosthetic device unsettling and difficult. In order for this approach to be effective, there needs to be open discussion between men and women prior to initiation of sexual activity. Where couples decide to experiment, it would be especially important to be alert to the need for lubricants.

As a final qualification, it is important to consider the use of dildos, and sexual rehabilitation efforts more broadly, for men on androgen deprivation therapy. These men typically experience drastic reduction of libido, often compromising their motivation for pursuing sexual rehabilitation, and potentially limiting their sense of fulfillment from sexual activity. While there are men like our patient, willing to investigate options despite a deficit of sexual desire, many men's interest in engaging with sexual rehabilitation dies with their libido.

Using dildos in clinical practice

We believe the potential advantages of dildos make them a legitimate choice among sexual rehabilitation techniques. However, many men and their partners will need encouragement that use of a dildo is a reasonable and innovative approach to rehabilitation. Some patients may fear that the approach is bizarre, or a depressing kind of last-ditch effort, and these fears can be addressed. Appropriate health professionals, including urologists, radiation oncologists, family practitioners, and/or sexual health clinicians could raise the possibility of using a dildo with prostate cancer patients as one of an array of possible approaches (including non-penetrative sex) to dealing with ED. The involvement of health professionals raises the possibility of proper use of equipment and better outcomes. Below is some of the information that could be offered to help patients find equipment and use it appropriately.

There are many variations in size, shape and material of dildo products. The best quality dildos are made of silicone rubber, which is durable, appropriately stiff, yet still flexible like a naturally erect penis. Use of a harness stabilizes the prosthesis. The shaft of the dildo is mounted at an angle on a flanged base, which holds it in the harness. Avoid choosing a size of dildo that will make it difficult or uncomfortable for the partner. Silicone dildos can be cleaned easily with soap and hot water or by boiling in water. Dildos can be purchased at sex shops or via the internet. There are web sites with comprehensive catalogues (e.g. www.sextoyspro.com; www.dildowarehouse.com; www.realistic.dildos.com). Alternatively, dildos could potentially be made available through physicians' offices.

While individual clinicians should be able to fairly easily incorporate information about dildos into their sexual rehabilitation practice, this scenario may not always be optimal. Some urologists (and other health professionals) may be uncomfortable approaching patients about use of a dildo. Also, some couples interested in trying a dildo may benefit from short-

term counseling and this is not always possible to incorporate into busy practices. For these reasons, we see a potential role for specialist sexuality counselors and/or clinics. We are currently underway with planning for a Prostate Cancer Sexualilty Clinic at Sunnybrook & Women College Health Sciences Centre in Toronto – to be staffed by social workers and psychologists trained in sexual counseling. A comprehensive approach to sexual rehabilitation will be implemented and evaluated. We intend to have dildos available to interested couples, and provide information and support related to their use.

Conclusion

The strap-on dildo is a simple and inexpensive strategy for dealing with impotence. In certain circumstances it can work better than more established medical treatments for ED. Use of a dildo potentially removes the fear of erectile failure, allows for increased stimulation of the glans, facilitates full-body contact between partners, and offers potential satisfaction to one's partner. Further understanding of the benefits and limitations of using the dildo for prostate cancer patients should be pursued through research. Potential benefits for men with ED for other reasons should also be investigated.

We encourage urologists (and other health professionals) to explore the potential of dildos during discussions with their patients about sexual rehabilitation. The medical community needs to be looking for new and innovative ways to help men dealing with the difficult consequences of prostate cancer treatment. Many men are desperate for more options. The dildo is a promising possibility. □

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