A Review of the Psychological and Emotional Issues in Men with Prostate Cancer and their Partners

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INTRODUCTION

Howard L. Harrod on his struggles with prostate cancer (PCa): 'Not only had I a sense of having been mutilated, but I had lost the very capacities that were symbolically associated with manhood.'[1] Many patients with PCa experience this jolt to their sense of manhood, thus making PCa unique among the various cancer diagnoses and worthy of independent discussion. In addition, PCa remains the most common male cancer and the third leading cause of all male cancer deaths.[2] Most physicians are aware of the link between cancer and mental health issues, but many forget or overlook just how important it is to address a patient's state of mental health. The overall prevalence of depression in those with PCa has been reported to be between 14 and 22% depending on treatment stage (pre, during, and post).[3] Depression/anxiety and PCa are associated with a nearly fivefold increased risk of Emergency Room (ER) visits, nearly threefold increased risk of hospitalization, and a threefold increased risk of excess death compared to those without mental health issues.[4] Furthermore, patients suffering from mental health issues are less likely to adhere to treatment, and are more likely to experience adverse reactions to treatment.[3] Lastly, depression and other mental health issues may be exceedingly difficult to identify and treat in males, thus many cases may go undiagnosed and either untreated or undertreated.[5] Ultimately, PCa and mental health issues may lead to an overall increase in medical costs and poor patient outcomes. Therefore, this reflection piece will serve to highlight the important relationship between PCa and mental health and provide an update on available treatments to support patients with PCa and their families.

SEXUAL AND EMOTIONAL EFFECTS OF DIAGNOSIS

PCa, from beginning to end, screening to death, is a disease riddled with psychological and emotional torment. Zisman et al, in a study on prostate biopsies, a procedure utilized in the diagnosis of PCa, reported nearly two-thirds of patients experience significant amounts of anxiety both before and up to 7 days after the biopsy.[6] Additionally, acute sexual dysfunction, lasting up to 30 days, was reported in 10% of patients. These findings were likely related to the psychological effects of worry and/or the physical effects of the biopsy itself. At diagnosis, thoughts and feelings involving fear of cancer spread, concern for loved ones, and impact on sexual health lead to a near immediate adverse impact on patient psyche.[7] Those most adversely impacted (and why) are those less than 65 years of age (decreased sexual functioning, greater pain, sleep disturbances, uncomfortable becoming sexually intimate), those diagnosed within the past year (fatigue, frequent urination, sleep disturbances, and hot flushes), and/or those with metastatic disease (depression, anxiety).[7] In addition, the stigma of having cancer, and potentially impaired sexuality, may prevent these patients from seeking adequate social and psychological support which may lead to a continual deterioration of mental health.[8] PCa itself may lead to psychological and emotional issues, but what about its treatment?

SEXUAL AND EMOTIONAL EFFECTS OF PCa TREATMENT

Active surveillance involves monitoring overall disease progression through repeat prostate-specific antigen (PSA) testing, digital rectal exams, and biopsies, but involves no active therapy. Though the therapy is

physically less altering, it is still associated with sexual dysfunction, distress, depression, and anxiety.[9] It has been hypothesized these issues may be related to biopsies (mentioned previously), distress over disease, psychological symptoms caused by cancer itself, or by the burden of age.[9] Regardless of cause, physicians should be aware that the mere presence of cancer, regardless of severity, is psychologically disturbing and should be addressed.

Active treatments include hormonal therapy, radiotherapy, and radical prostatectomy. Hormonal therapy involves giving medication to suppress testicular androgen production and subsequently reduce testosterone, PSA, and prostate tumor volume.[10] Of all PCa treatments, hormone therapy has the potential to cause the most physical, psychological, and emotional issues.[11] Physically, patients experience loss of muscle and bone mass, fat redistribution, increased risk of osteoporosis, diabetes, obesity, and cardiovascular-related mortality.[10] In addition, they experience loss of libido, erectile dysfunction, hot flashes, and cognitive dysfunction. In all, psychological and emotional issues may arise including depression, anxiety, fatigue, irritability, moodiness, tension, anxiety, and loss of vigor.[10]

Alternatively, radiotherapy, which involves applying high doses of ionizing radiation to the prostate and surrounding tissue in order to control, kill, or shrink malignant cells, may have the least overall impact on patient mental health. Of those that experience mental health issues most are related to the side effects of treatment and include severe lower urinary tracts symptoms (20%), sexual dysfunction (50%), fatigue, social dysfunction, sleep disturbances, cognitive dysfunction, gastrointestinal issues (13–38%), and a moderate to severe impairment in quality of life (9%).[12] In reality, a small but significant number of patients may go on to experience anxiety, depression, embarrassment, shame, anger, guilt, intimacy issues, and partner conflict.

The most established PCa treatment, radical prostatectomy, is described as the surgical removal of the entire prostate gland, seminal vesicles, ampulla of the vas deferens, and possibly lymph nodes. Mental health issues related to this treatment involve impaired erectile function, sexual desire, and sexual satisfaction.[13] The nerves involved in obtaining and maintaining erections are intimately involved with the prostate, and although preservation may be attempted, sexual function is rarely the same pre- to postsurgery. It has been reported that approximately 60% of patients are moderately to extremely dissatisfied with their impaired sexual function.[13] Those most likely to suffer from impaired sexual function, and the depression, anxiety, embarrassment, shame, guilt, intimacy issues, and partner conflict that may follow, are those that maintain high levels of sexual desire but have limited sexual function.[13] Ultimately, active PCa treatment appears to be a major cause of mental health issues, and in order to ensure proper patient care, physicians, regardless of specialty, should address these issues.

SEXUAL AND EMOTIONAL EFFECTS OF PCa ON SIGNIFICANT OTHERS

The discussion thus far has centered on patients and their psychological and emotional issues related to PCa and its treatment. For many patients, there is a significant other who may experience similar issues. Partner issues are seldom addressed because physicians often forget disease affects families, not individuals. Few papers have studied the role of the partner and the psychological and emotional issues partners face following a PCa diagnosis in their significant other. In general, psychological and emotional issues related to cancer diagnosis stem from four domains: the delivery of instrumental care, the emotional challenge of suffering, altered access to their partner, and altered intimacy with their partner.[14] A paper by Couper et al, on PCa diagnosis and the effects of treatment on female partners, reported many partners have maladaptive coping patterns including avoidance, wishful-thinking, and self-blame, and the severity of these maladaptive coping patterns corresponds directly with their degree of psychological distress (adjustment disorders, anxiety, depression, anger, etc.).[15] They also reported a large proportion of these women experience levels of distress that surpasses the threshold for psychiatric diagnosis. Kornblith et al, in a cross-sectional PCa study, discovered spouses report significantly greater psychological distress than the patients themselves.[16] Finally, JW Couper reported that in the first 6 months following a PCa diagnosis partner-reported marital satisfaction scores decrease and continue to do so as the relationship continues.[17] Ultimately, partners are important sources of support for cancer patients. To maintain this support structure, it is critical physicians address their well-being.

PREVENTION AND TREATMENT OF PCa-RELATED PSYCHOLOGICAL AND EMOTIONAL ISSUES

A common PCa theme is sexual dysfunction (not only in patients, but their partners as well). A survey conducted by Singer et al reported that two-thirds of men were willing to accept a 10% decrease in overall 5-year

survival (from 90 to 80%) to improve their chance of sexual potency following PCa treatment.[18] Furthermore, a study by Tavlarides et al reported that as anxiety levels increase, both sexual dysfunction and depression levels significantly increase.[19] Therefore, it is not surprising a majority of PCa-related mental health issues are associated with the fear/actual loss of sexual potency. Treatment of sexual potency issues may help prevent/treat mental health issues. Penile rehabilitation therapy involves a combination of therapies including phosphodiesterase-5 inhibitors (sildenafil), intracavernosal injections (alprostadil), vacuum constriction devices, and penile prosthesis, but efficacy remains widely variable.[20] Ultimately, studies have yet to be conducted regarding treatment of sexual dysfunction and its effect on depression/anxiety. It can be reasonably hypothesized, however, that improvement in potency would lead to improvement in mental health of both patients with PCa and their partners.

What else can be done to prevent/treat mental health issues related to PCa? Regardless of the disease process or treatment, the simplest and most effective thing a physician can do is to foster a supportive relationship and to simply ask patients how they are doing at each visit. This initial screening allows physicians to triage and treat minor issues in-office or refer out for specialized care if necessary. It is especially important to ask patients about suicide, as risk of suicide in men with PCa is fourfold higher than that of their age-matched peers (incidence 55 vs. 274 per 100 k).[21] Beyond in-office discussion, support, and the prescribing of medication, exist a number of psycho-supportive treatments for patients and their struggling partners. Mental health specialists often deliver these treatments, but all physicians should be familiar with the psycho-supportive treatments available as this allows for proper referral. For individuals, these psycho-supportive treatments include: cognitive behavioral therapy (CBT) (traditional and with physical activity), psychoeducational therapy (lecture, question, discussion groups), and hypnosis.

A meta-analysis by Dale et al reported CBT provided the most substantial benefit.[22] It is consistently more effective in regards to improving quality of life and sexual function, and in decreasing depression, anxiety, psychological distress, fatigue, physical impairment, and pain. Hypnosis was associated with highly significant improvements in anxiety, depression, and psychological distress. Finally, psychoeducational therapies had mixed results and were least successful.

Another type of therapy, considered most important of all, is psycho-supportive treatment that cares for both the individual with the disease and his partner. It is important because marital status has been shown to be an independent predictor of overall mortality in men with PCa, and unmarried men have a higher risk of PCa-specific mortality.[23] As mentioned previously, few papers discuss partners' psychological and emotional issues, but fewer discuss strategies to treat them. The only treatment successfully employed for couples is couple-focused psychosocial intervention (couples CBT).[17] This treatment is backed by years of data in breast cancer patients and their male partners, but few data exist on its effectiveness in relation to PCa patients and their female partners.[17] Despite the lack of an evidence-based approach, most agree preventative, couple-focused intervention would likely be beneficial to the patient and his partner.[15]

CONCLUSION

Overall, psychological and emotional issues including depression, anxiety, fear, anger, shame, embarrassment, and loss of intimacy are associated with PCa. Further studies investigating the relationship between PCa outcomes, sexual function, and mental health are required to fully assess these issues. Ultimately, physicians have the responsibility to inquire about these issues and to offer treatment if able or to refer patients to more specialized providers. Remember that cancer affects both individuals and their partners, and steps must be taken to provide physical, mental, and emotional treatment and support for all.

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