Addressing the Consequences of Fertility Preservation Oversight in a Prostate Cancer Patient with Major Depressive Disorder: A Case Report

Yi Ling (Elaine) Li, MD, Carrie Ernst, MD
Department of Psychiatry, Icahn School of Medicine at The Mount Sinai Hospital, New York, NY

BACKGROUND

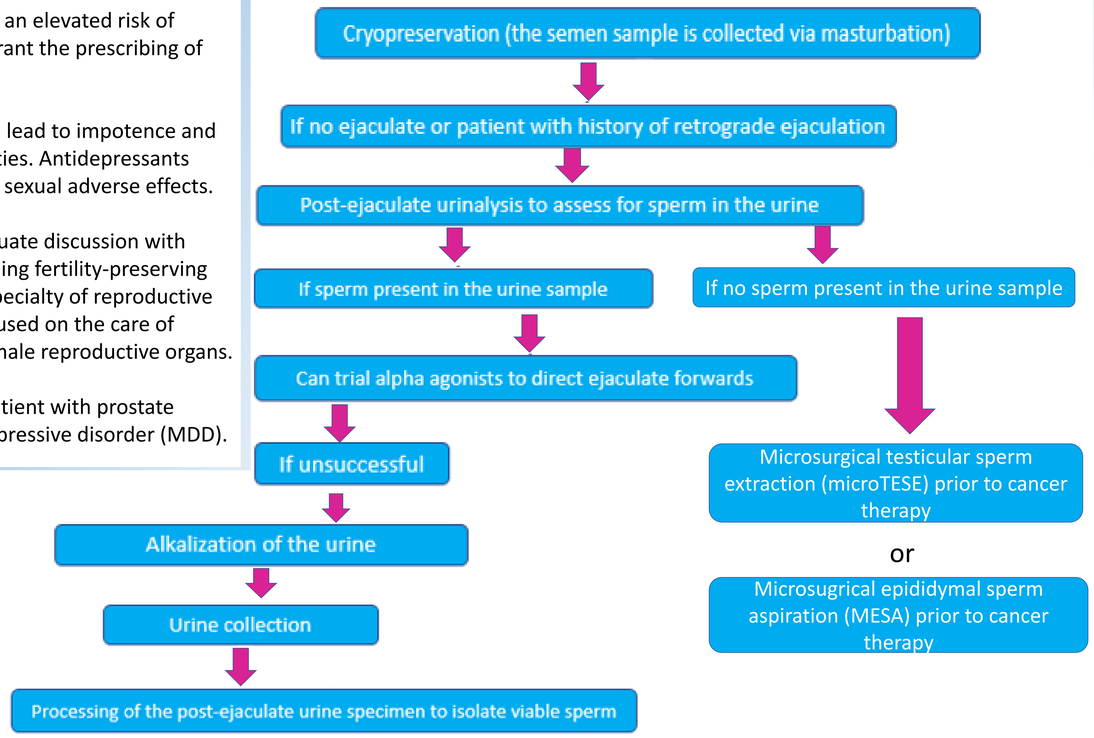
Men with prostate cancer have an elevated risk of psychiatric conditions that warrant the prescribing of psychotropic medications.

Prostate cancer treatments can lead to impotence and impaired reproductive capabilities. Antidepressants have also been associated with sexual adverse effects.

However, there is often inadequate discussion with prostate cancer patients regarding fertility-preserving options. Additionally, the subspecialty of reproductive psychiatry has been largely focused on the care of individuals with biologically female reproductive organs.

Here, we present a case of a patient with prostate cancer and comorbid major depressive disorder (MDD).

Male Fertility Preservation Techniques



CASE REPORT

A 52-year-old male with psychiatric history of unspecified anxiety disorder and treatment-resistant MDD and past medical history of a recent prostate cancer diagnosis was admitted for planned Robotic Assisted Laparoscopic Prostatectomy (RALP).

Psychiatry was consulted on post-operative day 1 for suicidal ideation.

On evaluation, patient endorsed "very low" mood for some time due to his prostate cancer diagnosis and erectile dysfunction, the latter of which he attributed to venlafaxine. He expressed distress about the prospect of worsening ED post-operation and endorsed an unsuccessful attempt to rapidly taper off his venlafaxine in order to establish a sperm bank prior to surgery.

OUTCOME

Patient was assessed to meet criteria for a major depressive episode combined with grief from the loss of potential biological fatherhood. Patient declined bupropion due to previous adverse effects, but was receptive to a referral for outpatient esketamine therapy.

Post-discharge chart review indicated that patient was admitted to inpatient psychiatry two months after his RALP for ongoing suicidal ideation related to his ED.

Antidepressants and Their Sexual Side Effects

Drug name	Main findings and level of evidence
Antidepressants	
SSRIs	
Citalopram	SD rates comparable to those for paroxetine (II) and other SSRIs (III) and significantly higher than those for reboxetine (II)
Escitalopram	Significantly higher rates of SD, particularly desire and orgasmic dysfunction, as compared with placebo (I), buproprion (I), and duloxetine (II)
Fluoxetine	Significantly higher rates of SD, particularly orgasm dysfunction in women, and lower levels of sexual satisfaction in patients treated with fluoxetine than in patients treated with reboxetine (II), buproprion (I), or placebo (I). No significant differences relative to other SSRIs (III)
Fluvoxamine	Significantly higher SD rates than for placebo (II). No significant differences relative to other SSRIs (III)
Paroxetine	Incidence of SD significantly superior to duloxetine (I), placebo (I), and buproprion (II)
Sertraline	Significantly higher SD rates as compared to mirtazapine (II), bupropion (I), and placebo (I), even though contrasting results have been reported between sertraline and bupropion with respect to treatment-related arousal dysfunction. Significantly lower sexual satisfaction as compared to bupropion (I) and placebo (I). No significant differences relative to other SSRIs (III)
SNRIs	
Duloxetine	Lower SD rates as compared to paroxetine (I) and escitalopram (II). However, both duloxetine and paroxetine are associated with significantly higher SD rates as compared to placebo (I)
Venlafaxine	Significantly higher SD rates for venlafaxine as compared to bupropion (II) and agomelatine (II). SD rates comparable with those of other SSRIs (III)
Tricyclics	
Amineptine	Significantly lower SD rates as compared to SSRIs and venlafaxine (III)
Clomipramine	Significantly higher orgasm dysfunction rates as compared to placebo (III)
Imipramine	SD rates for imipramine and phenelzine (III) are comparable, and each of them is significantly higher than for placebo (III)
MAOI and RIMA	
Moclobemide	Significantly lower SD rates as compared with SSRIs and venlafaxine (III)
Phenelzine	SD rates for imipramine and phenelzine (III) are comparable, and each of them is significantly higher than for placebo (III)
Transdermal selegiline	No significant difference between transdermal selegiline and placebo with respect to SD (II)
Other antidepressants	
Agomelatine	Significantly lower SD rates as compared to venlafaxine (II). No significant difference relative to placebo (II)
Bupropione	Significantly lower rates of SD as compared to venlafaxine (II), sertraline (I), escitalopram (II), paroxetine (II), and placebo (I). Significantly better in this respect than other SSRIs as well (III)
Mirtazapine	Significantly lower levels of SD as compared with sertraline (II). Significantly better as compared to SSRIs and venlafaxine (III)
Nefazodone	Significantly lower levels of SD as compared to SSRIs and venlafaxine (III)
Reboxetine	Significantly lower levels of SD as compared to fluoxetine (II) and citalopram (II). No significant difference relative to placebo (II)

DISCUSSION

This case is unique in that it highlights an infrequently discussed challenge in caring for the male patient with comorbid prostate cancer and psychiatric conditions requiring psychotropics.

This patient's ED was secondary to his antidepressant and likely exacerbated by his prostatectomy. Missed opportunities for preoperative interdisciplinary collaboration around a plan for fertility preservation along with management of both his psychiatric illnesses and ED led to acutely increased distress and suicidality.

Given the current availability of various evidence-based techniques for sperm preservation, proactive multidisciplinary discussions with urology, primary care, and psychiatry might have lessened his distress.

CONCLUSION

Collaborative care by the health care providers of a patient with prostate cancer throughout the process of treatment in order to ensure education and plan of action regarding childbearing prospects is of utmost importance, especially in cases where concomitant medication regimen for comorbid psychiatric disorders may present negative impact on fertility.

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DISCLOSURE

The authors declare that they have no conflicts of interest or relevant financial relationships to disclose concerning this poster presentation.