Appendix B: Long-term Side Effects and Recommendations for Management

This table accompanies the BC Guideline *Prostate Cancer – Follow up in Primary Care* and is adapted with permission from Cancer Care Ontario's *Follow-up Care and Psychosocial Needs of Survivors of Prostate Cancer*.[1] Refer also to *Appendix C:* Medications for the Management of Prostate Cancer Side Effects in Primary Care.

Side Effect	Management Options*
Sexual Dysfunction *Patients with primary treatment of surgery, radiation therapy, or androgen deprivation therapy*	
Erectile dysfunction	• Men may be prescribed phosphodiesterase type 5 (PDE5) inhibitors as first line treatment.* • Men who do not respond to PDE5 inhibitors will need more advanced treatments and should be referred to a urologist or sexual health expert.* • Men may be referred to penile rehabilitation programs, which include PDE5 inhibitors, vacuum constriction devices, intracorporal or intraurethral therapy, or placement of penile prostheses.*
Loss of libido	• Men and their partners should be referred to a healthcare professional with training in sexual health counselling, when available. • Testosterone therapy can be considered in men with signs and symptoms of testosterone deficiency and documented low serum testosterone levels, provided their cancer is treated and without evidence of persistent or recurrent disease, and if prescribed by the treating oncologist/urologist after extensive review of the potential risks.*
Anorgasmia	• Men and their partners should be referred to a healthcare professional with training in sexual health counselling, when available.*
Dry ejaculate	• Men should be educated on dry ejaculate.*
Climacturia	• Men should be provided education on self-management strategies, such as emptying the bladder before sexual relations, use of a condom, use of a penile constriction band, and Kegel exercises.*
Penile shortening or curvature	• Regular sexual stimulation may prevent penile shortening. • If there is significant penile curvature impairing sexual function, refer patient to a urologist.

Infertility	• Men and their partner should be informed that:
	  • men treated with radical prostatectomy ***will become*** infertile, and
	  • some men treated with radiation therapy ***may remain*** fertile, even when experiencing sexual dysfunction symptoms.*

Side Effect	Management Options*
Urinary Dysfunction *(Patients with primary treatment of surgery and/or radiation therapy)*	
Obstructive symptoms	• Selective alpha-antagonists may be prescribed for patients who ***have not*** undergone radical prostatectomy. • Refer to a urologist to evaluate for bladder neck contracture or urethral stricture.
Urgency symptoms	• If the patient is able to completely empty his bladder (i.e., post-void residual of <200cc), bladder antispasmodic medications (anticholinergics or beta-3 agonists) may be appropriate. • All refractory symptoms should result in a referral to a urologist for evaluation and escalation of therapy if appropriate*
Hematuria	• Men with hematuria should be referred to a urologist for evaluation*
Incontinence requiring urinary pads	• Men with persistent leakage impacting quality of life should be referred to a urologist to evaluate the cause of incontinence.* • Exercise intervention such as Kegel exercises may improve continence. Specialized physiotherapists and nurse continence advisors may help patients with stress incontinence following radical prostatectomy. • In men with post-prostatectomy incontinence >1 year, consider referral back to treating urologist for assessment for urethral slings or artificial urinary sphincters.
Bowel Dysfunction *Patients with primary treatment of radiation therapy*	

Rectal bleeding	• All men with rectal bleeding should be referred for a colonoscopy.*
	• For men with rectal bleeding post-radiation therapy, referral to a gastroenterologist who has experience in managing radiation therapy proctitis is recommended. ***The anterior rectum should not be biopsied due to the risk of a fistula of the rectum****
	• For men with bleeding secondary to radiation proctitis, the following strategies may be considered: *
	  • Dietary changes to bulk stool.
	  • Hydration education.
	  • Referral for assessment for other medical treatments, if primary management strategies are unsuccessful.

Urgency and frequency symptoms	For men with urgency and frequency symptoms, the following options may be considered:* • Dietary changes to bulk stool. • Hydration education. • Medical treatments (antidiarrheals, anticholinergics). • Pelvic floor muscle therapy.

Side Effect	Management Options*
Other Physical Side-effects *– continued* *Patients with primary treatment of surgery, radiation therapy, or androgen deprivation therapy*	
Anemia	• Investigation for common sources of anemia should be considered.*
Body composition alterations	• Men should be encouraged to participate in an exercise program.
Fatigue	• Men should be encouraged to participate in an exercise program.
Gynecomastia/ mastodynia	• In severe cases, surgical excision can be considered; patients should be referred to a specialist.*
Hot Flashes	• Treatment with transdermal estrogen, megestrol acetate, venlafaxine, cyproterone acetate, and medroxyprogesterone can be considered, however, use for this indication is off-label.** Longer-term prospective studies are required to determine whether these medications can alleviate hot flashes without increased harms. Use with caution because treatment with these medications has been associated with serious adverse effects. Consult the product monograph for a full list of adverse effects.
Physical activity levels	• Men should be encouraged to participate in an exercise program.
Bone health	• For recommendations on maintaining bone health, refer to *Osteoporosis: Diagnosis, Treatment and Fracture Prevention* at BCGuidelines.ca
Cognitive side-effects	• Rule out other reversible cognitive problems.
Psychological distress (depression and anxiety)	• Offer in-office psychological therapy and pharmacotherapy as appropriate. • Referral to a local support group and/or patient self-help group (see *Resources*, below).
General quality of life and psychosocial sequelae	• Men should be encouraged to participate in an exercise program. • Advise patients on strategies for achieving and maintaining a healthy weight using diet and exercise. • During scheduled follow-up clinical visits, assess men's psychosocial status; if distress is evident, refer to specialized care to address social and emotional quality of life, as well as support groups for coping training for couples when applicable. • Use of standardized assessment tools is recommended (e.g., EPIC or PHQ9).

* *Recommendations were adapted with modifications from CCO and are based on expert consensus; additional clinical references are outlined as indicated.*

** *Off-label: the prescription of a registered medicine for a use that is not included in the product information.*

Abbreviations: *PDE5 – phosphodiesterase type 5; QoL – quality of life; EPIC – expanded prostate cancer index composite; PHQ9 – Patient Health Questionnaire 9*

References

1. Matthew A, Souter LH, Breau RH, Canil C, Haider M,, Jamnicky R, et al. Follow-up care and psychosocial needs of survivors of prostate cancer. Toronto (ON): Cancer Care Ontario; 2015 June 16. Program in Evidence-based Care Guideline No.: 26-4.
2. Frisk J. Managing hot flushes in men after prostate cancer—A systematic review. Mauritas. 2010 Jan;65(1):15-22.
3. Gazarian M, Kelly M, McPhee JR, et al. Off-label use of medicines: consensus recommendations for evaluating appropriateness. MJA. 2006;185:544-8.