Lifestyle medicine and prostate cancer: Time to look at the bigger picture?

Prostate cancer is on the march! As per the latest Lancet Commission report, new prostate cancer cases are likely to double from 1.4 million in 2020 to 2.9 million in 2040. The number of annual deaths due to prostate cancer is projected to rise by 85%, from 375,000 to nearly 700,000 in the same period. The maximum impact will likely be felt in low- and middle-income countries, like India, due to the paucity of resources and the absence of early diagnoses.[1] This is also clearly reflected in the cancer registry data presented by Sankarapillai et al. in the current issue of the journal.[2] While advances and access to conventional treatments such as surgery, radiation, and various forms of systemic therapy need to be accelerated, there is a growing recognition for a more holistic and individualized approach incorporating various aspects of lifestyle medicine to improve oncological outcomes and quality of life (QoL) for prostate cancer patients. Indeed, in the coming years, it is likely that diet, exercise, stress management, sleep, and healthy lifestyle choices will gain frontline status as powerful adjuncts in the care of these patients.

A nutritious diet is an important component of a healthy lifestyle and can prevent many chronic diseases. There is accumulating evidence that a diet rich in fruits, vegetables, nuts, and whole grains can lower the risk of recurrent prostate cancer. In a recent cohort study of 2062 patients diagnosed with nonmetastatic prostate cancer, a higher intake of plant-based foods was associated with a decrease in prostate cancer progression, besides providing other health benefits. [3] It is perhaps time that patients be made aware of these latest studies, and nutritional counseling be incorporated as a part of multidisciplinary care for this disease.

Alcohol and tobacco smoke are WHO Grade 1 carcinogens, and there is now growing evidence of their association with prostate cancer as well.^[4,5] Smoking cessation programs and counseling and support services to eliminate or decrease alcohol intake can go a long way in enhancing the odds for a healthy and cancer-free life.

Regular physical exercise, including cardiorespiratory and strength training components, is also frequently advised by physicians to reduce fatigue, improve cardiovascular health, and enhance mental wellbeing. In particular, patients on androgen deprivation therapy may especially benefit from these exercise regimens by ensuring the preservation of lean muscle mass, decreasing fat accumulation, and counteracting fatigue, which is seen very commonly with these treatments. In a recent meta-analysis of six RCTs (332 patients), the authors found that exercise interventions ranging 2-12 months resulted in increased cardiorespiratory fitness, improved QoL, and, surprisingly, decreased PSA progression in patients on active surveillance for prostate cancer. [6] We surely do not need to wait for this effect to be proven beyond doubt before advising our patients along these lines. The positive effects of a graded and structured exercise regimen should be enjoyed by all, irrespective of their diagnosis or their age. The use of wearable devices to monitor and motivate exercise- and sleep-related interventions in prostate cancer can provide long-lasting benefits for these patients.^[7]

A prostate cancer diagnosis can have a profound psychological impact and result in anxiety and depression. Deep breathing exercises, yoga, and mindfulness meditation are a few stress reduction strategies that can be extremely beneficial to mental health. There is latest evidence to suggest that these methods assist in lowering stress levels and fatigue and enhance sleep quality in patients receiving treatment for prostate cancer. [8] Incorporating mental health services, like therapy or support groups, into cancer treatment regimens can potentially improve overall well-being and emotional fortitude.

Hence, now, it seems that the integration of lifestyle medicine into prostate cancer care is not merely a complementary approach but a necessary one. By embracing lifestyle medicine, we can provide prostate cancer patients with a holistic approach to their treatment and provide preventive and supportive care to potentially improve survival rates, reduce recurrence, and enhance the QoL for our patients.

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REFERENCES

- James ND, Tannock I, N'Dow J, Feng F, Gillessen S, Ali SA, et al. The lancet commission on prostate cancer: Planning for the surge in cases. Lancet 2024;403:1683-722.
- Sankarapillai J, Krishnan SK, Ramamoorthy T, Sudarshan KL, Mathur P. Descriptive epidemiology of Prostate cancer from the National Cancer Registry Programme, India. Indian J Urol 2024;40:168-74.

- Liu VN, Van Blarigan EL, Zhang L, Graff RE, Loeb S, Langlais CS, et al. Plant-based diets and disease progression in men with prostate cancer. JAMA Netw Open 2024;7:e249053.
- 4. Macke AJ, Petrosyan A. Alcohol and prostate cancer: Time to draw conclusions. Biomolecules 2022;12:375.
- Ellis ET, Fairman BJ, Stahr SD, Bensen JT, Mohler JL, Song L, et al. Cigarette smoking and prostate cancer aggressiveness among African and European American men. Cancer Causes Control. 2024 May 17. doi: 10.1007/s10552-024-01883-3. Epub ahead of print. PMID: 38758522.
- Lee DJ, Byeon JY, Park DH, Oh CG, Lee J, Choi YD, et al. Effects of exercise during active surveillance for prostate cancer: A systematic review and meta-analysis. Support Care Cancer 2024;32:406.
- Raines C, Noorvash B, Posadas EM, Sandler HM, Freedland SJ, Gresham G. Applications of wearable activity monitors for prostate cancer survivors: A systematic scoping review. Contemp Clin Trials 2024;143:107563.
- 8. Victorson D, Mishra KK, Sauer J, Langford G, Maletich C, Horowitz B, et al. Implementation Readiness and Initial Effects of a Brief Mindfulness Audio Intervention Compared With a Brief Music Control During Daily Radiation Therapy for Prostate Cancer: A Randomized Pilot Study. Glob Adv Integr Med Health. 2024 Apr 30;13:27536130241249140. doi: 10.1177/27536130241249140. PMID: 38694593; PMCID: PMC11062214.

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