

Importance of patient-reported outcomes and health-related quality of life when considering prostate cancer treatment

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Prostate cancer is the third commonest cancer among men in Hong Kong.¹ For organ-confined disease the current treatment options include surgical extirpation, external beam radiotherapy, brachytherapy, novel ablative therapy and active surveillance, each with different advantages and shortcomings. Therefore, patients often find difficulty navigating through the algorithm of treatment decision, even with advice from urologists and oncologists. Take the two classic options, surgery and radiotherapy as an example; each has comparable oncological outcome but is associated with a set of different possible complications, some of which may be long-lasting to the patient.^{2,3} In this regards, data on health-related quality of life (HrQoL) and patient-reported outcome (PRO) become important factors to take into consideration when choosing a prostate cancer treatment.

Health-related QoL has been defined as the functional effect of an illness and its consequent therapy upon a patient, as perceived by patient.⁴ Instruments used to assess HrQoL represent a much broader category of health status measures collectively referred to as PRO measures that are directly elicited from the patient.^{5,6} These PRO measures can be used to assess a unidimensional variable such as a symptom, or a multidimensional concept such as HrQoL, and are either self-administered or administered by a trained interviewer. Because they are derived from the patient's perspective, data from PRO measures are increasingly recognised to be as important as traditional physician-measured clinical outcomes.⁷ This is particularly important in prostate cancer management when subjective functional outcomes such as erectile function and urinary continence are often regarded as important as oncological control. After treatment, prostate cancer patients have subjectively lower HrQoL than their healthy peers in the general population⁸ and functional outcomes are often under-reported by physicians.^{9,10} Therefore, studies such as the one by Ng et al in this issue of *Hong Kong Medical Journal* provide a welcome guide for patients and clinicians in the choice of prostate cancer treatments.¹¹

Ng et al¹¹ report a retrospective study of the early and intermediate functional outcomes of a

group of patients who underwent two prostate cancer treatments (radical prostatectomy and radical radiotherapy), as measured by hospital record review and the Chinese version of the Expanded Prostate Index Composite (EPIC). The EPIC measures PRO in urinary, bowel and sexual domains and in each gives a summary HrQoL score. Common to most studies worldwide, it noted that radical surgery resulted in significantly worse urinary incontinence PRO than radiotherapy and this difference remained significant over time.^{3,12,13} Contrary to published data, sexual function PRO was similar between the two groups but this was likely related to the use of androgen deprivation in the radiotherapy group.^{2,13} Overall, patients treated surgically had a poorer urinary but similar bowel and sexual HrQoL to patients treated with radiotherapy. Although numerous studies have been published before comparing the PRO and HrQoL after different prostate cancer treatment modalities in Asian patients, including Japanese and Chinese patients, the current study is the first of its kind in Hong Kong.^{14–20} Valuable reference can be taken from its findings when discussing prostate cancer management in the local setting. A particular merit of the study is the fact that all patients in the surgical group were treated with a single contemporary approach (robot-assisted radical prostatectomy), a practice nowadays almost universally adopted in all urological units with the access to a surgical robot. Similarly, since the radiotherapy group patients was chosen from a relatively short time frame, the techniques of radiotherapy were unlikely to be changed, resulting in a uniform cohort.

Some caution needs to be exercised when interpreting the data. Initial post-treatment functional outcomes in the study were not patient-reported but were measured by clinicians and this has been acknowledged as a limitation by the authors. Second, the strategy of intraoperative cavernosal nerve-sparing techniques during the radical prostatectomy procedure was not included. Whether nerve-sparing strategies were adopted will affect the sexual PRO subsequently reported. Third, information about the adjunctive use of treatment to ameliorate the functional deficit (eg,

phosphodiesterase-5 inhibitors or intracorporeal prostaglandins for erectile dysfunction, additional surgical procedure for post-prostatectomy urinary incontinence) was not presented. These may profoundly affect the PRO of this group of patients.

Further studies to prospectively assess the PRO of patients with prostate cancer at different time points after their treatment should be conducted to give our patients the best data to guide their choice of treatment. Information about measures to preserve or re-achieve erectile function and urinary continence should be carefully recorded.

Author contributions

The author has approved the final version for publication, and takes responsibility for its accuracy and integrity.

Conflict of interest

The author declares no conflict of interest.

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