



## Research Article

## Prostate Cancer Patients' Preferences for Intermittent vs. Continuous Androgen Deprivation—A Pilot Institutional Study

David Chun-Leung Chau, BSc<sup>a</sup>, David Wang, BSc<sup>b</sup>, Alissa Tedesco, BSc<sup>b</sup>,  
Merrylee McGuffin, MRT(T)<sup>c</sup>, Lisa Di Prospero, MRT(T) BSc, MSc<sup>de</sup>, Margaret Fitch, RN, PhD<sup>b</sup>,  
Xingshan Cao, PhD<sup>f</sup>, Deb Feldman-Stewart, PhD<sup>g</sup>, Janet Ellis, MD<sup>h</sup> and  
Ewa Szumacher, MD, FRCP(C), MED<sup>e\*</sup>

<sup>a</sup> University of Waterloo, Waterloo, Ontario

<sup>b</sup> Faculty of Medicine, University of Toronto, Toronto, Ontario

<sup>c</sup> Department of Radiation Therapy, Sunnybrook Odette Cancer Centre, Toronto, Ontario

<sup>d</sup> Department of Research and Education, Odette Cancer Centre, Sunnybrook Health Sciences Centre, Toronto, Ontario

<sup>e</sup> Department of Radiation Oncology, University of Toronto, Toronto, Ontario

<sup>f</sup> Department of Evaluative Clinical Science, Sunnybrook Health Sciences Centre, Toronto, Ontario

<sup>g</sup> Department of Oncology, Queen's University, Kingston, Ontario

<sup>h</sup> Department of Psychiatry, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, Ontario

## ABSTRACT

**Introduction:** With locally advanced, recurrent, and metastatic prostate cancer patients, patient preference between intermittent (IAD) and continuous (CAD) androgen deprivation therapy has not been investigated. The goal of the study was to determine patients' preference for IAD vs. CAD therapy. The secondary aim was to elucidate demographic or treatment variables that may affect a patient's preference for one type of hormonal treatment.

**Materials and Methods:** Using a tradeoff model that demonstrates the difference in outcome between IAD and CAD, a survey questionnaire was developed and administered to prostate cancer patients at the Odette Cancer Centre at Sunnybrook Health Sciences Centre in Toronto, Ontario, Canada. Only patients who had (1) locally advanced prostate cancer, (2) been previously treated for prostate cancer with relapsing prostate-specific antigen, or (3) slow metastatic disease were asked to participate. Data related to patients' demographic information and their decisional preference factors were collected.

**Results and Conclusions:** Overall, 36 of 53 (68%) patients completed the survey. Most patients favoured IAD ( $n = 32$ ) over CAD ( $n = 4$ ). Patients currently on radical treatment (adjuvant hormone therapy and radiation therapy) preferred CAD compared with patients who were not on radical treatment ( $P = .044$ ). Patients with high ( $>20$  ng/L) pretreatment prostate-specific antigen showed preference for CAD; however, this was not statistically significant ( $P = 0.07$ ). Patients from both groups viewed quality of life as the strongest influence on their treatment preference, but had diverging opinions on side effects and general well being. The results of this pilot study could serve as a guide for future studies; a larger study combined with qualitative methodology may better address patients' needs and minimize any regret over their hormonal treatment.

## RÉSUMÉ

**Introduction :** Chez les patients présentant un cancer de la prostate localement avancé, récurrent et métastatique, Il n'existe pas d'études sur les préférences des patients entre la thérapie de privation androgénique intermittente (PAI) ou permanente (PAP). Le but de l'étude est de déterminer la préférence des patients pour la thérapie PAI ou PAP. L'objectif secondaire est de déterminer les variables démographiques ou de traitement susceptibles d'avoir une incidence sur la préférence du patient pour un type de traitement hormonal.

**Matériel et méthodologie :** En utilisant un modèle de compromis qui permet d'établir la différence de résultat entre la PAI et la PAP, un questionnaire a été élaboré et administré aux patients atteints d'un cancer de la prostate au Centre de cancérologie Odette du Centre des sciences de la santé Sunnybrook de Toronto, en Ontario, Canada. Seuls les patients présentant (1): un cancer de la prostate localement avancé; (2): ayant déjà été traités pour un cancer de la prostate avec APS récurrent, ou (3): une maladie métastatique lente ont été invités à participer à l'étude. Les données démographiques des patients et les facteurs ayant une incidence sur leur préférence ont été recueillis.

**Résultats et conclusions :** Au total, 36 patients sur 53 (68 %) ont répondu au questionnaire. La majorité des patients favorisent la PAI ( $n=32$ ) plutôt que la PAP ( $n=4$ ). Les patients présentement soumis à un traitement radical (traitement hormonal adjuvant et radiothérapie) sont plus susceptibles de préférer la PAP que les patients qui ne suivent pas un traitement radical ( $p=0,044$ ). Les patients présentant un APS élevé ( $>20$  ng/L) avant le traitement montrent une préférence pour la PAP, bien que cette donnée ne soit pas statistiquement significative ( $p=0,07$ ). Les patients des deux groupes considèrent que la qualité de vie est le facteur qui a la plus grande influence

This research was presented at the 2014 International Cancer Education Conference in Clearwater, Florida, 22–25 October 2014.

\* Corresponding author: Ewa Szumacher, MD, FRCP(C), MEd, Department of Radiation Oncology, Odette Cancer Centre, Sunnybrook Health Sciences Centre, 2075 Bayview Avenue, Toronto, ON, Canada M4N 3M5.

E-mail address: ewa.szumacher@sunnybrook.ca (E. Szumacher).

sur leur choix de traitement, mais ont des opinions divergentes sur les effets secondaires et le bien-être général. Les résultats de cette étude-pilote pourraient servir de guide pour des études futures; une plus grande étude combinée

à une méthodologie qualitative pourrait mieux répondre aux besoins des patients et minimiser leurs regrets, s'il y a lieu, face au choix de traitement hormonal.

**Keywords:** Patients preferences; prostate cancer; hormonal treatment

## Introduction

Prostate cancer is the sixth leading cause of death among North American men, accounting for 10% of all cancer mortality in 2013 [1]. In addition, prostate cancer is the second-most commonly diagnosed cancer in North American men, accounting for 24% of all new cancer diagnoses and has a lifetime prevalence of 13% [1]. With the growing occurrence of prostate cancer, the number of available treatment options also increases, which makes the process of treatment decision making challenging for health care providers, patients, and their families. A variety of treatment options can be recommended for prostate cancer patients based on patients' risk categories [2]: active surveillance; different forms of radiotherapy, such as intensity-modulated radiotherapy (IMRT) or brachytherapy; or surgery and hormonal treatment (HT), which can be given as a monotherapy or combined with other modalities. HT consists of androgen deprivation therapy (ADT), which can be instituted as a continuous or intermittent approach [2–4].

ADT is administered to patients as a hormonal injection typically as a luteinizing hormone–releasing hormone (LHRH) agonist to inhibit androgen synthesis, suppressing their systemic androgen levels [2]. The aim of ADT was to prolong patients' survival, delay disease progression, and control patients' symptoms. Continuous androgen deprivation therapy (CAD) is administered at regular intervals, usually every 3 months [5, 6]. Intermittent androgen deprivation (IAD) is administered during an initial on-treatment phase and withheld when a predefined prostate-specific antigen (PSA) level is achieved, at which PSA surveillance follows [6, 7]. The PSA level and its changes serve as indicators to a patient's response to his initial or ongoing treatment, which is emphasized in the on-treatment and/or off-treatment cycles of IAD. After cessation of initial treatment, IAD continues with the off-treatment phase until clinical parameters (a predefined PSA level) dictate reinitiation of the next on-treatment phase [6]. ADT may be added to the salvage treatment to those patients who developed biochemical failure after prostatectomy and/or radiation therapy. It can be given as an adjuvant treatment to high-risk patients with prostate cancer, to whom radiation therapy and ADT are often concurrently administered to improve the effectiveness of the treatment.

Patients' choice between CAD and IAD therapy is influenced by a variety of factors; the choice often depends on the patient's survival gains, overall quality of life, sexual function, fatigue, urinary function, and other side effects [8–10]. In addition, social and economic factors such as the

patient's income and treatment and transportation costs, may also impact a patient's preference of IAD or CAD [2, 4, 5, 7]. For example, in the province of Ontario, Canada, ADT for prostate cancer patients aged younger than 65 years is not covered by the provincial Ontario Health Insurance Plan. Because of the substantial costs of the HT, patients may not be able to afford their treatments and would be forced to go with the IAD treatment. Practitioners must be aware of the varying factors affecting patients' treatment decisions and respect patients' choices. Cancer patients' satisfaction with their treatment is extremely important and their input into treatment decisions will lead them to choose the best option for their situation and to accept treatment-induced complications [11–14].

ADT is associated with a variety of side effects which decrease a patient's quality of life. The meta-analysis of nine randomized controlled trials by Nirula had compared IAD and CAD treatment in 5,508 patients (who met the criteria) and showed no significant differences in time-to-event outcomes between the two groups in any of the studies [7]. Patients treated with IAD had a superior quality of life over patients treated with CAD. Choosing CAD over IAD resulted in higher treatment costs, inconvenience, and potential increased toxicities [7, 15]. That meta-analysis provided fair evidence to recommend the use of IAD over CAD for the treatment of men with relapsing, locally advanced or metastatic prostate cancer who achieve a good initial response to androgen deprivation.

However, practitioners continue to disagree over the best ADT treatment option for patients in this study's population. There are a variety of items that affect practitioners and their particular opinions. Congruently, patients may also prefer certain treatments based on their own values [8]. As such, there is a need to further understand factors that influence patients' decision between CAD and IAD, and the benefits of increasing the patient's role in a shared decision-making process [4]. The objectives of this study were to better understand prostate patients' preferences about what type of HT (IAD vs. CAD) they would prefer and reasons why one treatment may be favoured over another and to identify factors that patients are willing to tradeoff when making their treatment choice between IAD and CAD.

## Methods

### *Survey Development*

The survey questionnaire was developed in several steps, which included a comprehensive literature review related to

Download English Version:

<https://daneshyari.com/en/article/2738186>

Download Persian Version:

<https://daneshyari.com/article/2738186>

[Daneshyari.com](https://daneshyari.com)