

## Is it Time to Recommend the Use of Prostate Cancer Units for the Optimal Management of Our Patients?

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### Abstract

A Prostate Cancer Unit is a place where men can be cared for by specialists in prostate cancer (PC) working together within a multi-professional team. From October 2010 our hospital accepted the institution of a Prostate Cancer Unit. Our Prostate Unit was established in a large size hospital. The main aim of the Unit was to provide a continuum of care for patients from early diagnosis, through treatment planning in all stages of the disease, to follow-up, prevention and management of complications related to PC. The future of PC patients relies in a successful multidisciplinary collaboration between experienced physicians which can lead to important advantages in all the phases and aspects of PC management. The establishment of Prostate Cancer Units could provide financial savings avoid inappropriate procedures, improve outcomes delivering high-quality care to patients. These aspects are particularly relevant considering the high-incidence of PC as one of the most important medical problems facing the male population.

**Keywords:** Prostate neoplasm; Multidisciplinary team; Prostate unit

### Introduction

Prostate cancer (PC) is established as one of the most important medical problems facing the male population [1]. PC is the most common solid neoplasm (214 cases per 1000 men) and the second most common cause of cancer death in men [1]. Its management involves several complex issues for both clinicians and patients. An early diagnosis is necessary to implement well – balanced therapeutic options and the correct evaluation can reduce the risk of overtreatment with its consequential adverse effects [2]. The optimal management for localized PC is controversial, with options including active surveillance, surgery, radiotherapy and focal therapies. The management of the progressive disease after primary treatments and that of the advanced PC requires a correct diagnostic evaluation and a therapeutic choice among radiotherapy, focal therapies, hormone therapies, chemotherapies or other novel target treatments [3]. Efficient organization of the national healthcare system can be a tool to help improve patient outcomes [4]. The natural history of PC from asymptomatic organ-confined disease to locally advanced, metastatic and hormone-refractory disease describes the complexity of this tumor's biology and justifies the need for a fluid collaboration between expert physicians. Breast and Prostate cancer, respectively, are the most common cancers in women and in men, and different similarities have been underlined. The paradigm of the patient consulting a multidisciplinary medical team has been an established standard approach in treating breast cancer [5]. Such multidisciplinary approach can offer the best care for men with PC as it does for women with breast cancer.

### Description/Organization of a Prostate Cancer Unit: our experience

A multidisciplinary team (MDT) is comprised of healthcare professionals from different disciplines whose goal of providing optimal patient care is achieved through coordination and communication with one another.

A Prostate Cancer Unit is a place where men can be cared for by specialists in PC working together within a multi-professional team [6]. From October 2010 our hospital (AS and VP) accepted the institution of a Prostate Cancer Unit. Our Prostate Unit was established in a large size hospital, covering a population of more than 300.000 people.

The main aim of the Unit was to provide a continuum of care

for patients from early diagnosis, through treatment planning in all stages of the disease, to follow-up, prevention and management of complications related to PC. Patients that can be followed by the Prostate Cancer Unit include cases in which the diagnosis is as yet un-established but who could benefit for an early diagnosis program; cases in which the diagnosis of PC is confirmed and who can be considered for treatment planning; cases following primary treatments for discussion of further care; cases in follow-up after or during treatment.

Following indications from previous experiences [6], we accepted some basic requirements for our Prostate Cancer Unit:

1. The Unit is represented by a core team whose members have a specialist training in prostate disorders, spend a relevant amount of their time working with PC, undertake continuing professional education, have a high level scientific production on PC experimental and clinical research.
2. The core team includes: two Coordinators (one referred for the diagnostic and one for the clinical therapeutic management of PC) from any specialist of the team; two urologists (spending 50% or more of their working time in prostate disease, managing at least 100 PC cases per year, carrying out at least 25 radical prostatectomies per year and at least one prostate clinic per week); one urologist/radiologist with expertise in prostate biopsies (spending more than 70% of his working time in prostate biopsies, performing more than 400 prostate biopsies per year), one uro-pathologist (spending 30% or more of his working time in prostate disease, analyzing at least 250 sets of prostate biopsies per year); two radiation oncologists (spending 50% or more of their working time in prostate

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1	PC is a very complex disease, involving diagnostic and therapeutic multidisciplinary decisions
2	Optimal and well balanced information for PC cases requires a shift from a mono-disciplinary to a synergic multidisciplinary approach
3	As Breast Cancer Units for breast cancer, multiprofessional Prostate Cancer Units for PC are the best answer to manage patients and the complexity of their disease
4	Prostate Cancer Units offer the patient a complete, simultaneous, unambiguous, polispecialistic counselling on his disease, avoiding him to tour to different physicians
5	A MDT can provide a continuum of care for patients through early diagnosis, treatment planning in all stages of the disease, follow-up, prevention and management of complications
6	Prostate Cancer Units connect a team whose members have specialist training in PC, spend relevant amount of time in working with PC, have a high level scientific qualification on PC
7	In Prostate Cancer Units the MDT can better propose the appropriate management options on the basis of the pathological reports, clinical and biochemical assessments and the risk benefit evaluation
8	Prostate Cancer Units are in possession of or have easy direct access to all requirements for a complete, adequate and high level management of all phases of PC
9	Patients referred to a Prostate Cancer Unit receive more balanced information and decisions obtained in an open and interactive fashion, with all clinical specialists present at the same time
10	Patients referred to a Prostate Cancer Unit experience easier availability, enhanced coordination and reduced delays to conclude the diagnostic and therapeutic item

**Table 1:** Ten good reasons to support a Prostate Cancer Unit.

disease, carrying out radiotherapy on at least 25 PC per year); two medical oncologists (spending 30% or more of their working time in prostate disease, managing at least 50 PC cases per year); one radiologist with main experience in all aspects of prostate imaging, and a particular expertise in multiparametric magnetic resonance (spending 50% or more of his working time in prostate disease); one radiologist dedicated to focal therapies and one nuclear medicine expert (spending 30% or more of his working time in prostate disease). Additional professional services also include a sexologist / andrologist, psychologist, palliative care specialist, a clinical trials coordinator.

3. The Prostate Cancer Unit must be of sufficient size (number of specialists) to cover more than 100 diagnosed cases of PC coming under its care each year.
4. Research and scientific production is an important part of the activity of the Prostate Cancer Unit, as much as participation in clinical trials for the management of PC.
5. All specialists of the Prostate Cancer Unit core team organize and participate to multidisciplinary meetings every 10 days. Cases referred to the Unit are discussed during the meeting. The MTD will propose the appropriate management options on the basis of pathological and radiological reports, clinical and biochemical assessments and risk benefit evaluations. The final decision will be made by patients informed by one of the clinicians.
6. The Prostate Cancer Unit is in possession of or has easy direct access to all requirements for a complete, adequate and high level management in all phases of PC.

### Advantages of Prostate Cancer Units

The inclusion of radiologists in the core team of our Unit is justified by the growing role of diagnostic imaging (multiparametric magnetic resonance, PET-CT, focal therapies imaging) in PC management.

A SEER-based study of more than 85.000 men with PC demonstrated that in the general clinical practice the treatment decisions had little relation with patient preferences but were predominantly associated with the specialty of the counseling clinician [7]. The primary advantage for patients referred to MTD organized into a Prostate Cancer Unit is to receive balanced information and options obtained in an open and interactive fashion, with all clinical specialists present at the same time.

In the decision – making process for men with PC, this is the area in which the multidisciplinary approach can improve patient care. The MTD approach guarantees a higher probability for the PC patient to receive adequate information on the disease and on all possible therapeutic strategies, balancing advantages and related side effects. From the available evidences, patients with different cancers who are managed by MDT can experience better clinical outcomes [8-9]. A further advantage described by patients referred to the Prostate Cancer Unit is an easier availability, enhanced coordination and reduced delays to complete all the diagnostic and therapeutic steps. This is likely to result in a better outcome for PC patients as early intervention is particularly crucial in PC management [10].

### Conclusions

The future of PC patients relies in a successful multidisciplinary collaboration between experienced physicians which can lead to important advantages in all the phases and aspects of PC management (Table 1). The establishment of Prostate Cancer Units could provide financial savings (at now not evaluated), avoid inappropriate procedures; improve outcomes delivering high-quality care to patients. These aspects are particularly relevant considering the high-incidence of PC as one of the most important medical problems facing the male population.

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