Multidisciplinary team management of patients with urological cancer

ABSTRACT

Several specialist teams are involved in the management of patients with urological cancer. These specialists have been brought together as a multidisciplinary team to discuss, plan and deliver care to patients in an effective, patient-centred approach. This article discusses the benefits of this approach and ways in which multidisciplinary team working can be optimized.

Management of urological cancers requires the expertise of several specialists. This makes the multidisciplinary team approach appropriate for managing patients with urological cancers – these include cancers of the prostate, bladder, kidneys, ureters, testes and penis. This review discusses the role of the multidisciplinary team, taking the management of patients with prostate cancer as an example, and outlines strategies which can be used to optimize multidisciplinary team working.

Prostate cancer is the most common cancer in men in the UK. About 47 000 men are diagnosed with prostate cancer every year and 11 000 die of it each year (Cancer Research UK, 2019). This means that a large number of men need to be given their diagnosis in a kind and compassionate way. They also need to be offered the appropriate treatment choices and guided through the decision-making process. Following treatment, these patients will benefit from support to cope with side effects of treatment and other disease-related complications. For those with incurable disease, best supportive care and end-of-life care ensures that symptoms are palliated and patients die with dignity.

In the past, patients presented more commonly with metastatic prostate cancer, but this has changed. Through a combination of increased awareness, increase in uptake of diagnostic procedures and improved treatment outcomes, more men are being diagnosed with localized disease which can be cured (Collin et al, 2008). This means that a larger number of men surviving after treatment will continue to need support, possibly for the rest of their lives. Currently, up to 84% of men diagnosed with prostate cancer survive for 10 years or more (Cancer Research UK, 2019).

Working as a team to improve outcomes

Contemporary management of urological cancers is shaped around the findings and recommendations of a document produced by the National Institute for Clinical Excellence titled *Improving Outcomes in Urological Cancers* (National Institute for Clinical Excellence, 2002). The document assessed the management of urological cancers in England and Wales and made recommendations to improve standards of care across the NHS, via the centralisation of certain aspects of care to specialist centres under the auspices of a multidisciplinary team. The document describes the make up of the multidisciplinary team and the roles to be played by the members.

The members of the multidisciplinary team should include (but not be limited to) the following:

- A urologist who is designated as the lead clinician who will take overall responsibility for the service
- Other urologists, with a minimum of two in the multidisciplinary team who have a special interest in cancer
- A clinical nurse specialist who will provide information and support for patients. This nurse may, if suitably trained, carry out a specified range of diagnostic and therapeutic procedures
- A radiologist with expertise in urological cancers
- A pathologist with adequate training on the current recommendations for reporting the histopathology of urological cancer
- An oncologist with expertise in radiotherapy and chemotherapy for patients with urological cancers. The oncologist should collaborate with other specialist oncologists in the network and linked centres
- A palliative care specialist who may be a physician or a nurse
- Team coordinator or secretary who will provide clerical support for the multidisciplinary team. The coordinator records all decisions made by the team and communicates appropriate information promptly to all those who may require it

The role of the local urological cancer team

As a team, the urology cancer multidisciplinary team aims to do the following:

- Provide a rapid diagnostic and assessment service

Mr CN Molokwu, Consultant Uro-Oncology Surgeon, Department of Urology, Bradford Teaching Hospitals, Bradford BD9 6RJ

Ms T Naqvi, Urology Ward Manager, Department of Urology, Bradford Teaching Hospitals, Bradford

Mr D Tyson, Lead Clinical Nurse Specialist, Department of Urology, Bradford Teaching Hospitals, Bradford

Correspondence to: Mr CN Molokwu (chidi.molokwu@nhs.net)

- Identify and manage all patients with urological cancers, including those being cared for elsewhere in the hospital
- Be responsible for the provision of information, advice and support for all patients and their carers throughout the course of the illness. This should include those who are receiving the majority of their care from clinicians who are not members of the urological cancer team, such as care of the elderly teams
- Provide treatment and follow up for these patients and ensure that every patient with urological cancer receives multidisciplinary management with appropriate oncological input
- Provide a rapid referral service for patients who require specialist management
- Liaise with primary care teams, specialist teams, services for the elderly and voluntary organizations such as hospices
- Ensure that GPs are given prompt and full information about any changes in their patient's illness or treatment
- Collect data for network-wide audit.

The multidisciplinary team also maintains contact with other professionals who may be actively involved in treating or supporting patients including the ward nursing team, stoma nurses, liaison psychiatrists, clinical psychologists, counsellors with expertise in cancer and psychosexual problems, social workers, occupational therapists, primary health-care teams and clinical geneticists or genetics counsellors.

The patient journey with prostate cancer: the Bradford experience

In Bradford patients with prostate cancer cover a broad spectrum with a wide range of stage of disease, patient age, distance from home address, and cultural and ethnic background. Bradford Teaching Hospitals serve the western part of west Yorkshire including Bradford, Airedale, Calderdale and Huddersfield districts, a population of about 1.2 million people. The Bradford urology multidisciplinary team meets for about 3 hours once a week. Around 70 patients are discussed at each meeting which includes patients with all urological cancers at various stages of diagnosis and treatment planning.

The patient's journey usually begins with a fast-track 14-day cancer referral from his GP, usually triggered by an elevated serum prostate-specific antigen level or abnormal prostate on digital rectal examination. The first visit is with a urologist who takes a history and examines the prostate. Depending on the findings and the patient's comorbidities and life expectancy, an appropriate plan is made. For patients eligible for radical treatment (prostatectomy or radiotherapy) a magnetic resonance imaging scan of the prostate and targeted or systematic biopsies are arranged, which brings the patient in contact with the radiology team. The biopsy samples are sent to the pathology team for analysis. About 7 days after biopsy, the pathology report is available for discussion at the weekly multidisciplinary team meeting. At this meeting the demographic, clinical, radiological and pathological details of each case are discussed. About 15 new patients with prostate cancer are discussed each week. Depending on the treatment plan decided on, the appropriate specialists are assigned to each case and appointments with the patients are arranged.

The patients are seen by a urologist and clinical nurse specialist to receive the diagnosis. All considerations relating to breaking bad news are taken into account. The urologist provides details of the grade and stage of disease and the treatment options. For localized prostate cancer, the options could be active surveillance, surgery (robot-assisted radical prostatectomy) or radiotherapy (external beam or brachytherapy). The urologist discusses surgical options and active surveillance if appropriate. The patient is subsequently seen by the clinical (radiation) oncologist to discuss radiotherapy. The clinical nurse specialist provides additional counselling regarding treatment options and side effects, performs an initial holistic needs assessment, provides printed information leaflets, and gives contact details to the patient. Throughout the decision-making and treatment process, the clinical nurse specialist remains a point of contact for the patient to guide him through uncertainties while providing information and support.

Ward-based care

The goals of ward-based care for patients with prostate cancer are tailored to each individual patient with a holistic, patient-centred approach, determined by the patient's physical status, his expectations, the extent of disease, the treatment undertaken and his social support. Planning the patient's ward-based care starts with taking a comprehensive history upon admission for surgery, and assessing his baseline levels of activities of daily living. This helps set realistic goals for postoperative recovery. Assessments undertaken by the ward nursing team include the patient's cognitive state, mobility, psychological wellbeing and social support. Education and understanding about the treatment and side effects helps the patient manage his expectations, and empowers him to take a central role in his recovery. The ward team provides a caring and encouraging environment that minimizes the anxiety experienced by patients and their families.

Ward-based care adopts a multidisciplinary approach. The members of the team involved in the care of these patients include the medical staff who review the patients on a daily basis, nursing staff on the ward who carry out the day-to-day care of the patients such as wound care, drain and catheter management, and medication administration, dieticians for those who require additional nutritional support, a physiotherapist and occupational therapist to help with patients' mobility and address patients' needs at home, and social services for those who need additional support at home. The team works towards the common goals of making the ward stay safer and discharging the patient in a timely fashion. Early discharge planning is undertaken as part of the postoperative care planning for patients who have had a prostatectomy to allow a speedy and safe discharge once the required clinical criteria are met.

Evidence of multidisciplinary team impact on patient care

Evidence demonstrating the benefit of cancer multidisciplinary team decision making in patient care is variable. Studies have shown that multidisciplinary team discussion changes the decision of a single clinician in up to 50% of cases (Lamb et al, 2011; Pillay et al, 2016). This reflects the fact that the multidisciplinary team environment allows pooling of knowledge from multiple specialists and multiple specialties. Clinical evidence supporting various treatment options is rapidly evolving and can sometimes be contradictory. The multidisciplinary team setting allows options to be weighed, giving consideration to each patient's unique circumstances. Multidisciplinary teams adopt a number of strategies in arriving at a final treatment decision including group consensus (92% of decisions), adherence to clinical practice guidelines (57% of decisions) or other evidence-based medicine sources (33% of decisions) (Rankin et al, 2018). A survey of 173 urology multidisciplinary team members reported that 68% of respondents felt that multidisciplinary team discussion was beneficial for patient care through improved clinical decisions, planning of investigations, helping when discussing treatment plans with patients, cross-speciality referrals, and documentation of decisions in patients' records (Lamb et al, 2014).

The impact of cancer multidisciplinary team input on actual patient outcomes such as disease-specific and overall survival is difficult to demonstrate. Randomized trials to help clarify the role of cancer multidisciplinary teams would not be practical given what is presently known, as it would be inappropriate to deny a patient the benefit of a wider knowledge base in deciding which treatment options to offer.

Effective multidisciplinary team working

Characteristics of an effective cancer multidisciplinary team as outlined by Soukup et al (2018) are detailed in *Table 1*.

Lamb et al (2013) surveyed 1636 multidisciplinary team members to identify key themes that made multidisciplinary team meetings more effective. These included:

1. The importance of non-technical skills, organizational support and good relationships between team members for effective team working

Table 1. Characteristics of an effective multidisciplinary team for patients with cancer

The team	Level of expertise and specialization
	Attendance of multidisciplinary team meetings
	Leadership or chair of the multidisciplinary team
	Team working and culture (e.g. mutual respect and trust, equality, resolution of conflict, constructive discussion, absence of personal agendas, ability to request and provide clarification)
	Personal development and training
Infrastructure for the multidisciplinary team	Appropriate meeting room
	Availability of technology and equipment (e.g. teleconferencing)
Multidisciplinary team organization	Regular meetings
Logistics	Preparation for meetings
	Organization during meetings
	Post-meeting coordination of services for the patient
Patient-centred clinical decision making	Who to discuss, i.e. having local mechanisms in place to identify all patients who would benefit from discussion at a multidisciplinary team meeting
	Patient-centred care (e.g. patient's views and preferences are presented by someone who has met the patient, and the patient is given sufficient information to make a well-informed decision on his/her treatment and care)
	Clinical decision-making process
	The information the multidisciplinary team needs to make informed decisions at team meetings is as follows: pathological, radiological, comorbidities, psychosocial, palliative care needs, patient history, and patient views
	Decisions at team meetings need to be evidence based, patient centred, and in line with standard treatment protocols
Team governance	Organizational support (e.g. funding and resources)
	Data collection during team meetings, analysis and audit of outcomes
	Clinical governance (e.g. performance assessment and peer review against similar multidisciplinary teams)

From Soukup et al (2018)

KEY POINTS

- A multidisciplinary team approach to patient care improves decision making in patients with cancer.
- The multidisciplinary team should include the full range of health-care professionals involved in patient care.
- Multidisciplinary team performance can be improved by adopting strategies that harness the strengths of the team members in an efficient manner.

2. Recording of disagreements (potentially sharing them with patients) and the importance of patient-centred information in relation to team decision making
3. The central role of clinical nurse specialists as the patient's advocates.

Challenges of the multidisciplinary team approach

There are some disadvantages of the multidisciplinary team approach which must be recognized.

Maintaining physician–patient relationships

Patients often like to develop a relationship with the clinician who is leading their care. With a multidisciplinary team involved, several health-care professionals might consult with the patient regarding various aspects of care. Involvement of a multidisciplinary team should not remove the responsibility for the patient's care from the lead physician.

Frequency of meetings

In most centres, multidisciplinary team meetings are held once a week, which could lead to delays in decisions for patients. Core multidisciplinary team members need open lines of communication between them so that cases that need urgent decisions can be discussed and treatment initiated without waiting for the next multidisciplinary team meeting.

Case selection

Each cancer network should agree which cases should be brought for mandatory discussion, those which are optional, and those that do not require multidisciplinary team discussion. Time in multidisciplinary team meetings is precious and the most complex patients as well as newly diagnosed patients should be prioritised.

Premature discussion

All necessary investigation results should be available before a patient is listed for multidisciplinary team discussion to avoid multiple discussions, unless multidisciplinary input is required in planning investigations. Clinicians should resist using the multidisciplinary team meeting to discuss cases that do not meet agreed criteria for team decision making.

Assessing multidisciplinary team performance

A number of factors have been identified by Soukup et al (2018) that affect multidisciplinary team performance and should be constantly assessed by multidisciplinary teams.

Factors negatively impacting decision making and implementation

Lack of necessary information, lack of consideration of patient comorbidities and choices, non-attendance of key team members, inadequate time to discuss all patients, and technological problems with video conferencing can all cause problems with decision making and care provision.

Factors positively impacting decision making and implementation

Better case preparation, effective team leadership, involvement of an anaesthetist in the multidisciplinary team, refining the inclusion criteria for multidisciplinary team discussion and inclusion of patients in multidisciplinary teams are all beneficial.

Conclusions

The multidisciplinary team approach has had a positive impact on the management of patients with urological cancer. Most clinicians agree that multidisciplinary team discussion improves decision making. Team leaders need to ensure that the factors that positively influence the workings of the multidisciplinary team are in place and factors that have a negative influence are minimized. **BJHM**

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