Improving outcomes in urological cancers: The impact of “multidisciplinary team meetings”

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Abstract  
Introduction: In order to improve the outcomes of urological cancers, guidelines published by the National Institute of Clinical Excellence encourage the management of cancer patients by specific Multi-Disciplinary Teams (MDTs) with discussion of cancer patients at MDT Meetings. The aim of this prospective study was to examine the changes in management resulting from review at MDT Meetings in our unit.

Methods: Over a six month period 124 cancer cases were discussed at 10 meetings. Prior to the meetings consultants completed a form stating their proposed management and whether they thought this would be changed after discussion. At the meeting histological, radiological and clinical data were reviewed and a collective decision about the optimal treatment was made. Any changes were recorded.

Results: Two of 124 cases had their clinical management changed as a result of the meeting. These were identified (amongst 10 others) as potential ‘change cases’ prior to the meeting. Four changes were made to histological reports and 1 to radiology; none of these affected clinical management.

Conclusion: Discussion of cancer cases at MDMs made no difference to the clinical management in over 98% of cases. Consultants correctly identified cases requiring discussion, indicating that a selective rather than blanket approach would be appropriate. This has the potential to reduce the considerable costs involved without affecting patient care.

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Introduction

UK Guidelines by the National Institute for Clinical Excellence (NICE) published in the document *Improving outcomes in urological cancers* promote the formation of local Multidisciplinary Teams (MDTs) made up of designated specialists to collectively manage all cases of urological cancer (both new and existing).\(^1\) It is noted that although urological malignancies account for 11.7% of cancer deaths\(^2\) urological services have lagged behind other specialities in forming co-ordinated MDTs.\(^1\)

The guidelines encourage regular MDT meetings where relevant information is gathered and cases are discussed with a view to making collective evidence-based decisions.\(^1\) However, there is a lack of evidence supporting the idea that MDT meetings will improve cancer outcomes in urology.\(^1\)

The aim of this prospective study was to examine the impact of MDT meetings in a District General Hospital with respect to changes in management resulting from case review.

Methods

MDT meetings in our unit occupy one session each fortnight and are attended by three consultants in urology, a lead clinician, a pathologist, a radiologist, an oncologist, two urology nurse practitioners and junior staff. Meetings were analysed prospectively over a period of 6 months. Prior to each meeting, individual consultants were requested to complete a pro forma for each case under their care to be discussed stating the patient’s details and diagnosis, the consultant’s own management plan and whether he thought this had potential to be changed. At each meeting one of the authors recorded any changes made to pathology or radiological reports following MDT review and compared the agreed management plan for each case to that proposed by the clinician.

Results

During the study 124 urological cancer cases were discussed; consultants identified 12 of these as potential “case changes” prior to the meetings. There were two clinical management changes as a result of MDT discussion, both of which were from the “case change” group (see Table 1).

There were four histological and one radiological report changes (see Table 1); none of these had any alteration on clinical management.

Conclusion

It appears that the vast majority of newly diagnosed urological cancer cases do not require discussion at an MDT meeting, and those that do benefit can be filtered out by consultants in advance. Whilst it may be the case that a longer study would have revealed more pertinent management changes, possibly from larger numbers of diagnostic reviews, we feel that this is unlikely and the discussion of every single case not justified.

<table>
<thead>
<tr>
<th>Change</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Histological</strong></td>
<td></td>
</tr>
<tr>
<td>1. Grade 2 to Grade 3 bladder cancer(^a)</td>
<td>86-year-old male — inoperable tumour</td>
</tr>
<tr>
<td>2. Grade 1 to Grade 2 bladder cancer(^a)</td>
<td>77-year-old male (T1 tumour) — undergoing surveillance and intravesical chemotherapy</td>
</tr>
<tr>
<td>3. Gleason 3 + 5 to 4 + 5 prostate cancer(^a)</td>
<td>85-year-old male — undergoing hormone manipulation</td>
</tr>
<tr>
<td>4. Gleason 2 + 2 to 3 + 2 prostate cancer(^a)</td>
<td>66-year-old male — suitable for radical prostatectomy</td>
</tr>
<tr>
<td><strong>Radiological</strong></td>
<td></td>
</tr>
<tr>
<td>1. Renal cyst(^a, b)</td>
<td>Reported as benign but queried by Urologist. Later considered benign therefore no management change</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td></td>
</tr>
<tr>
<td>1. Radiotherapy cf symptomatic treatment(^b)</td>
<td>84-year-old male with locally advanced bladder cancer; Outcome — death from cardiac causes 2 months later</td>
</tr>
<tr>
<td>2. Regular review cf surgery(^b)</td>
<td>24-year-old male with a suspicious testicular lesion on USS; Outcome — continues to be under review 12 months later</td>
</tr>
</tbody>
</table>

\(^a\) Made no difference to management.

\(^b\) Identified by consultants as possible “case changes” prior to the meetings.
Multidisciplinary team management (with regular meetings) is a fundamental pillar of improving outcomes in urological cancers and is becoming more widespread across a variety of specialities. Indeed the concept has been described as a fourth cancer treatment modality after surgery, chemotherapy and radiotherapy. The knowledge that a panel of specialists discuss every cancer case is reassuring both to patients and clinicians alike and will be amongst patient expectations increasingly so in the future. This can be seen as part of the movement towards a consultant-delivered service.

By working together, all modalities can be considered from the outset allowing improved planning and preventing any compromise later on in a patient’s treatment. The administrative aspect has potential to facilitate auditing and monitoring of local services, bringing together all aspects of patient care and prevents loss of follow-up, forming a “co-ordination” mechanism which improves feedback and ultimately, clinical outcomes. There is also a highly educational value to be attached for all attendees.

There are, however, hurdles to overcome particularly in terms of funding and manpower, the latter necessitating co-ordination with other cancer groups. To date, few centres have been allocated extra resources for meetings; ours has been fortunate to receive a dedicated session every 2 weeks. Specialist uropathologists and uroradiologists reviewing all relevant cases prior to meetings could reduce meeting times without compromising patient care. Attendance at these sessions inevitably takes time away from the provision of other services such as clinics or operating lists.

The introduction of MDT meetings is an expensive exercise: NICE have calculated this to be £6.4 million on a national scale to cover co-ordinators, additional staff time and additional consultant sessions. The results of this study suggest that the costs are not well defensible.

Our study shows that consultants are quite capable of identifying cases that require discussion with other team members. The small number of management changes as a result of MDT meeting (less than 2% of cases discussed) had been recognised in this manner; adopting a targeted approach could make savings on resources without adversely affecting patient care provided all cancer management decisions are continued to be brought to the attention of a consultant. The low rate of changes may well be cited as a measure of the success of MDT meetings: an advantage that would not be lost.

References