Wednesday 25 June 16.00–17.00 Poster Session 11: Bladder Cancer 2 Chairmen: R. Cowan and T. O'Brien

P100

Delays in the diagnosis of bladder cancer: still a problem

B. ANTAO, R. WILSON and M.J. STOWER
York District Hospital, York, UK

OBJECTIVE

To assess the delays in diagnosis and treatment of bladder cancer, and to study the various factors responsible for these possible delays.

PATIENTS AND METHODS

Data were collected retrospectively on all newly diagnosed bladder cancers over a 1-year period from 1 January 2000 to 31 December 2000 in York. Various levels of delay (patient, GP and hospital) were assessed and compared with results from a similar study by one of the authors 14 years earlier. Results are presented as the median (range).

RESULTS

In all, 103 patients with newly diagnosed bladder cancer were identified, of whom 23 were excluded from the study as they were treated either privately or as emergencies. Thus the total number of patient included in this study was 80. The median (range) total delay was 12 (4–60) weeks; the median delay by the patients and GPs was < 1 week each, but there was a delay of 4 (1–8) weeks between referral and the first hospital visit, and then a delay of 6 (2– 12) weeks to a definitive TURBT.

CONCLUSION

These results were similar to those reported in 1988, but there was a changing trend in which the patients were presenting to their GP earlier and the GPs were very prompt in referring their patients. The hospital delays have not been reduced, despite introducing a haematuria clinic. There are still considerable procedural delays and they have become a significant factor compared with the previous study. Thus this issue needs to be addressed to be able to meet the forthcoming national cancer treatment times.

P101

Should microscopic haematuria be investigated within 2 weeks?

K. WEIGHTMAN, A. MAJLESSI, S. SRIPRASAD and G.R. MUFTI
Medway Maritime Hospital, Kent , UK

INTRODUCTION

The need for urgent investigation of microscopic haematuria (MH) has been the subject of a recent debate. It has been suggested that unlike macroscopic haematuria, MH does not warrant rapid assessment [*BJU Int* 2002; **90**: 355–7]. The aim of our study was to analyse the prevalence of urological pathology in our patient population, to determine whether patients with MH need to be seen within 2 weeks of referral.

PATIENTS AND METHODS

Consecutive patients who attended our haematuria clinic over an 18-month period were studied. Investigations included urine microscopy, cytology, ultrasonography and cystoscopy. IVU was used where indicated.

RESULTS

Of the 302 patients who attended, 123 (41%) had haematuria on dipstick testing. Of these, 30 (24%) had a significant pathology and in eight (7%) the diagnosis was TCC of the bladder. In only nine (8%) was the presence of red cells confirmed on microscopic examination. The grade and stage of the tumours ranged from G1pTa to G3pT2. Urine cytology was positive in only one of the eight cancers diagnosed. Of the 199 patients with macroscopic haematuria, malignancy was diagnosed in 21 (11%).

CONCLUSION

Negative microscopy and cytology do not exclude the presence of malignancy in patients with MH. As the number of cases of malignancy in the MH group was considerable in this study, these patients should be managed with the same priority as those with macroscopic haematuria.

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A comparative study of plasmakinetic and monopolar transurethral resection of bladder tumour (TURBT)

M. HAYNES, R. NIRULA, A. REES*, R. FLYNN and J.A. THOMAS
*Departments of Urology and *Pathology, Princess of Wales Hospital, Bridgend, Wales, UK*

INTRODUCTION

The use of the PlasmaKinetic™ (PK, Gyrus Medical Systems, UK) system in managing bladder tumours is poorly documented. We conducted a prospective comparative study of PK TURBT with monopolar TURBT in newly presenting bladder tumours to assess its safety and efficacy.

PATIENTS AND METHODS

Over a 5-month period from July 2002, all patients with a new bladder tumour were entered into the study. All patients under the care of J.A.T. underwent PK TURBT and all those under the care of R.F. underwent monopolar TURBT. PK TURBT was performed in normal saline with a resectoscope, a 4-mm bipolar loop electrode and the PS2 setting on the Gyrus PK generator. Monopolar TURBT was performed using glycine irrigation with a resectoscope, a 4-mm loop electrode and a Force 2 diathermy unit (Valleylab Inc, Mountain View, USA). We compared 10 patients who underwent PK TURBT with 10 who underwent monopolar TURBT. A uropathologist, unaware of the identity of the consultant and method of resection, assessed the histological specimens for type, grade and stage of tumour, depth of tissue sample provided and degree of diathermy artefact.

RESULTS

There were no bladder perforations in either group. Only half the patients treated by PK TURBT required irrigation, whereas all did so with monopolar TURBT. Both systems provided adequate tissue for histological typing, grading and staging of disease. The specimens obtained with the PK system showed a higher proportion of diathermy change, but this did not affect histological interpretation.

CONCLUSION

The PK system offers a safe, haemostatic alternative to standard monopolar TURBT, with comparable histology.

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Laparoscopic cystectomy and laparoscopically assisted ileal conduit: the initial experience

P.D. RIMINGTON, S.K. RAI and A. ADENIYI
Eastbourne District General Hospital, Sussex, UK

INTRODUCTION

Advances in laparoscopic techniques and equipment have led to the development of more complex operations. We report the initial experience of 10 laparoscopic radical cystectomies (LRCs) with laparoscopically assisted ileal conduit formation, and compare the early recovery data with the previous 10 open radical cystectomies performed by the same surgical team .

PATIENTS AND METHODS

Ten consecutive patients underwent LRC with laparoscopically assisted ileal conduit formation. Using purely endoscopic techniques, the cystectomy and pelvic lymph node dissection were performed, the left ureter transferred to the right and the ileal loop segment isolated. Using a 4-cm appendicectomy incision the ileum was re-anastomosed using a stapler, the uretero-ileal anastomosis completed over stents and the stoma fashioned in the second port site. We compared operative duration, blood loss and blood transfusion, fluid replacement, postoperative albumen, complications and hospital stay, and analgesic demand and duration of stay in the intensive care unit. The histological completeness of the dissection was also compared.

RESULTS

There was a clear decrease in blood loss and the need for transfusion; the patients required less fluid replacement, recovered normal albumin status faster, and had fewer complications and a shorter hospital stay. The tumour was completely excised in all LRC patients. The functional status at 6 weeks after surgery was remarkably good.

CONCLUSION

LRC and laparoscopically assisted ileal conduit construction shows great promise as a procedure of lesser morbidity for those patients with invasive bladder cancer. The principles of oncological surgery are fully compatible with a laparoscopic approach and we look forward to presenting long-term follow-up data at later meetings.

Funding: British Urology Foundation

P104

Quality of life after cystectomy and orthotopic neobladder vs ileal conduit urinary diversion

J. PHILIP, J. DeSOUZA, D.A. OWEN, J.S. GRIME* and P. JAVLÉ
*Leighton Hospital, Crewe, and *Royal Liverpool University Hospital, UK*

INTRODUCTION

Orthotopic bladder substitution (OBS) after cystectomy for bladder cancer aims to offer a cure with the least possible detriment to quality of life. We compared health-related quality of life (HRQoL) between patients who underwent OBS or ileal conduit diversion (ICD) after cystectomy.

PATIENTS AND METHODS

Thirty-nine patients who underwent cystectomy (22 OBS and 17 ICD) responded to postal questionnaires (the Short-Form 36 and a validated functional index questionnaire) assessing six functional and eight HRQoL domains.

RESULTS

There was no significant difference in age (mean 67.1 years; OBS 65.8, ICD 67.4) and follow-up period. Seven of eight HRQoL scales were favourable in both groups with no significant difference between them. While interest in sex was equal, being affirmed to varying degrees by 10 of 22 with OBS and five of 11 with ICD, only four of 19 men with OBS and five of 10 with ICD could maintain an erection to varying degrees. Of OBS patients, 91% had significant relationships and a more active lifestyle; 73% of the OBS patients were continent, with only 23% reporting marginally reduced QoL with pad usage. Three OBS patients used clean intermittent catheterization. Of ICD patients, 41% felt less complete and were embarrassed because of the stoma, with half reporting peristomal irritation and apprehension of stomal leakage.

CONCLUSIONS

In an age-matched population there was no significant difference in QoL indices, but issues of demeanour persist in patients with ICD. Patients with OBS continued to have a more active lifestyle, attaining near-normal urethral voiding with good continence. A detailed discussion of the long-term functional outcome would engender a realistic expectation, allowing better adaptation.

P105

Radical cystectomy: impact of advanced age and comorbidity on outcome

S. MASOOD, M.S. NASEEM, S. SRIPRASAD, M.K.M. SHERIFF, J.H. PALMER and G.R. MUFTI
Medway Maritime Hospital, Gillingham, Kent, UK

OBJECTIVE

To study the impact of advanced age and comorbidity on mortality, early complication rates, and duration of hospital stay after radical cystectomy.

PATIENTS AND METHODS

In all, 150 patients underwent radical cystectomy from 1990 to 2002; they were divided into three subgroups by age (< 70, 70–79 years and >80 years). Likewise, the cohort was divided into three different subgroups by ASA score (1, 2 and 3). The incidence of mortality, early complications and duration of hospital stay were compared amongst the various subgroups. The chi-square test was used to analyse the statistical significance of differences.

RESULTS

The overall major early complication rate was 20%, with complications of 18.6%, 17.6% and 30.8% in the three respective age groups. The differences were not significant (P = 0.55). The incidence of complications in the three respective ASA groups was none, 22% and 25%. The differences were significant ($P = 0.03$). Five patients (3%) died; two were aged <70, two were 70–80 and one was >80 years old. No patient died in the ASA 1 group. The hospital stay was significantly longer in patients aged >70 than <70 years ($P = 0.04$); similarly, the duration of stay was more for ASA 2 and 3 patients, but the difference was not significant ($P = 0.67$).

CONCLUSIONS

ASA score and not age determines the morbidity and mortality after cystectomy. The length of hospital stay is greater in older patients and in those with a higher ASA score, but the difference was not statistically significant in ASA groups.

P106

A follow-up study of the investigation and management of muscle-invasive bladder cancer

M.P. MOODY and A.J. DICKINSON
Derriford Hospital, Plymouth, UK

INTRODUCTION

We audited the present management of patients presenting with muscle-invasive bladder cancer in 1999 and compared it with previously published data from the same region.

METHODS

The previous study assessed patients in 1989 and 1993. The standards for assessment and treatment had been defined. This study collected data for 1999.

RESULTS

In all, 186, 199 and 102 patients were evaluated for 1989, 1993 and 1999 respectively. The respective percentages of patients having each investigation is shown in the Table. In 1989 and 1993, 35% of patients received immediate definitive treatment, and this increased to 68% (1999). Of the patients receiving primary definitive treatment the cystectomy rate increased from 15% in 1989 to 20% in 1993 and 36% in 1999. There was an associated decrease in the use of radical radiotherapy and salvage cystectomies. The median (range) delay in days for each stage is also shown in the Table:

In 1999 the median (range) delay for CT or MRI was 29 (2–203) days.

CONCLUSION

In this region we have been aware of previously published inadequacies in the diagnosis and staging of invasive bladder cancer, and the delays in treatment. Patients are now being seen more quickly. There have been improvements in staging and treatment. However, there has been no change in the overall delays for definitive treatment. This is possibly because of delays in obtaining the appropriate imaging after the diagnosis has been made. This study supports our region's improvements and indicates areas for further improvement and resource allocation. It also provides a benchmark against which the effects of current changes can be measured.

Investigation or delay, days	1989	1993	1999
IVU	69	58	40
Ultrasonography	24	38	64
EUA	80	84	86
Chest X-ray	53	48	48
CT/MRI	23	36	63
GP referral to first seen	24 (12–42)	31 (15–51)	16 (1–145)
First seen to TURBT	35 (8–75)	21 (1–46)	26 (1–168)
TURBT to definitive treatment	55 (31–82)	44 (27–56)	80 (4–387)
Referral to definitive treatment	114	96	107

P107

Why do women with bladder cancer have a worse prognosis than men?

A. MORAN, A. SOWERBUTTS, S. COLLINS, R. COWAN* and N. CLARKE*
*Centre for Cancer Epidemiology, University of Manchester, and *Christie Hospital NHS Trust, Manchester, UK*

INTRODUCTION

Studies from the UK, USA and Europe have reported that women with bladder cancer have a poorer survival than men. We undertook a population-based study to determine the reasons for this difference.

PATIENTS AND METHODS

All patients diagnosed with a new bladder tumour in 1998 in a population of 4 million were identified using the local cancer registry. Details on treatment and death were abstracted from the registry database, and on stage and grade from pathology reports. Case notes were reviewed to confirm staging details. Bladder cancer survival rates were calculated.

RESULTS

In all, 779 men and 348 women with new bladder tumours were identified; the survival rates at 6 months after diagnosis were 9.4% higher in men than women (91.7% vs 82.3%). The gap was similar at 1 year (9.5%) and then decreased slowly to 6.1% at 4 years. Of women, 10.9% presented with either T4b or metastatic disease, compared with 4.9% of men. Stage-specific survival rates (other than for superficial tumours) were 11–17% lower in women than in men. For those with T2–T4a disease, 53% of men received radical radiotherapy, compared with 33% of women; 21% of each underwent cystectomy.

CONCLUSIONS

Survival rates were lower in women in the 6 months after diagnosis, explained partly by a greater proportion of women presenting

with advanced disease. However, stage-specific survival was also lower in women. Further analyses will be undertaken to identify the contribution of factors such as age, social class and treatment to this finding.

Funding: North West Regional Health Authority

P108

Cystectomy for carcinoma of the bladder with nodal metastases

J. OLSBURGH, J. ADSHEAD, D. HROUDA, M. BOWER* and T. CHRISTMAS
*Charing Cross Hospital, and *Chelsea and Westminster Hospital, London, UK*

INTRODUCTION

The management of bladder cancer with suspected nodal metastases is controversial, with a poor long-term survival. We review our experience of radical cystectomy for both organ-confined and locally advanced bladder cancer, with an emphasis on the management of nodal metastases.

PATIENTS AND METHODS

We undertook a retrospective review of 188 consecutive radical cystectomy/lymphadenectomy operations between 1992 and 2002 (180 by one surgeon). For staging we used the 1997 TNM and stage grouping classifications. Overall survival duration was calculated from the date of surgery. Complete data were available for 172 (91%) cases; the median follow-up for the cohort was 4.4 years.

RESULTS

The histological diagnosis was TCC in 167 (89%) cases. Considering all cystectomies, 26% had nodal metastases and a further 44 (25%) had lymphovascular invasion (LVI) with no nodal metastases. The actuarial survival after cystectomy by tumour stage was:

		Mean (95% CI) survival at	
Stage	*n* (%)	2 years	3 years
N0/LVI–	88	79 (70–88)	68 (57–79)
N0/LVI+	41	47 (31–63)	28 (13–43)
N+	44	44 (28–60)	35 (19–51)
Stage II	30	66 (50–82)	53 (33–73)
Stage III	52	37 (22–52)	31 (16–46)
Stage IV	47	41 (25–57)	28 (13–43)

CONCLUSION

It is encouraging that in locally advanced and regional node-positive bladder cancer 3-year survival rates of 28–35% can be achieved with radical cystectomy and lymphadenectomy. The survival for node-positive bladder cancer is equivalent to that of node-negative disease with LVI, although the contribution of adjuvant chemotherapy cannot be accounted for in this analysis.

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Radical radiotherapy for muscle-invasive bladder cancer: results of a contemporary series

R.A. COWAN, C.A. McBAIN, W.D.R. RYDER, J.P. LOGUE, J.W. WYLIE and G.R. READ*
*Christie Hospital NHS Trust, Manchester, and *Royal Preston Hospital, Preston, Lancs, UK*

INTRODUCTION

Technological advances have improved the accuracy of radiotherapy treatment planning and delivery. We report the results of a contemporary series of patients receiving primary radiotherapy for muscle-invasive bladder cancer.

PATIENTS AND METHODS

In all, 149 patients referred for radical radiotherapy for a unifocal T2–T3N0M0 TCC of the bladder of ≤7 cm were recruited into a three-armed trial investigating different radiotherapy doses and target volumes. Their median age was 67.4 years, 70% were stage T3 and 26% had hydronephrosis. All patients underwent MRI staging and received CT-planned, conformal radiotherapy of 52.5–57.5 Gy in 16–20 fractions over 3–4 weeks. The response was assessed cystoscopically in 139 patients after 4 months.

RESULTS

Outcomes were equivalent across the three trial arms. The complete response (CR) rate on first check cystoscopy was 75% overall, with a 5-year local control rate of 50%. The 5-year overall survival was 58% (T2, 68%; T3, 50%, $P = 0.033$) with cause-specific survival of 63% (T2, 81%l T3, 58%, $P = 0.002$). The cystectomy-free survival was 47% at 5 years. Local recurrence developed in 36/112 patients after an initial CR (superficial 16/36, muscle invasive 16/36, not known four/36). Twenty-eight patients underwent salvage cystectomy for residual or recurrent disease, with a 3-year survival after cystectomy of 54%. Radiotherapy was well tolerated with no patient requiring cystectomy for treatment-related toxicity.

CONCLUSIONS

Modern radiotherapy can result in survival rates comparable with those after cystectomy, with almost half of patients alive with a well-functioning bladder at 5 years. Further improvements may be possible with chemotherapy given concurrently during radiotherapy.