Greater Manchester &
Cheshire Cancer Network

Bladder Cancer Guidelines

Agreed by Urology CSG: October 2011
Review Date: September 2013

Bladder Cancer

1. Referral Guidelines

The following patients should be considered as potentially having bladder cancer and should be referred urgently by their GP:

a) Those patients fitting the national two-week wait referral guidelines (NICE Guidance – "Referral Guidelines for Suspected Cancer – 2005"). This includes adults over 50 years of age with microscopic haematuria and any adult with macroscopic haematuria.

b) An incidental finding of a bladder mass on imaging.

c) Any patient with a recurrent unexplained urinary tract infection should also be considered at risk.

NB: The CSG are aware of suggestions that a single bout of macroscopic haematuria may be treated as "cystitis" related and not referred to a haematuria clinic. This is regarded as a high risk strategy and inevitably, bladder cancers will be missed using this approach. The CSG recommendation is that ALL macroscopic haematuria patients be referred to a urology department for evaluation.

2. Initial Assessment

All patients with suspected bladder cancer should be assessed in a haematuria clinic. Outpatient cystoscopy should be performed in this clinic by an appropriately trained professional. It is recommended that a cystoscopy should be considered even if an upper tract abnormality is identified on imaging e.g. a renal neoplasm.

All patients with unexplained macroscopic haematuria and patients over 50 with microscopic haematuria should be investigated using contrast CT. Intra-Venous Urography combined with renal USS may be considered as an alternative. If possible these investigations should be performed before transurethral resection of the bladder tumour (TURBT).

Urine cytology should be considered for patients with frank haematuria. Other tests include measurement of blood pressure, serum biochemistry, haematology and urine for bacteriology.

Patients with newly identified bladder tumours should be admitted for TURBT within 31 days of diagnosis. A pre-operative CT/MR scan should be organised for patients with suspected muscle invasive disease

3. TURBT

At initial transurethral resection (TURBT), complete resection of macroscopic disease including sampling of the underlying detrusor muscle should be carried out. Separate biopsies of areas of abnormal looking urothelium should also be performed. Photodynamic assisted diagnostic techniques may be used to assist the resection process.

EUA findings, bladder capacity, position, extent and number of tumours should all be recorded in the operation note.

Intravesical Mitomycin C should be administered within 24 hours of resection (and ideally within 6 hours of resection) for patients who are thought to have superficial disease, unless there is a suspected bladder perforation or significant post-TUR bleeding.

Histology for all patients should be discussed subsequently at the local MDT. Pathological assessment should include specific statements regarding tumour grade and the relationship of the tumour with the lamina propria and detrusor muscle, where this is possible. Cases with high risk features must also be discussed subsequently at a Specialist MDT.

4. Post TURBT Management

Pathologically confirmed low and intermediate risk superficial disease should be managed by the local MDT (LMDT).

High risk and muscle invasive disease should be referred for discussion and subsequent management at a specialist MDT (SMDT).

4.1 Low risk superficial disease (G1/2, pTa)

Cystoscopic follow up should be carried out three months after the original resection. At that stage patients should be categorised by risk (MRC groups 1 - 3). An alternative means for categorising risk is the EORTC superficial bladder cancer risk calculator. All patients should be considered for and included in cancer trials where these are available.

Newly diagnosed pTa and pT1 grade 1 and 2 tumours without CIS should be followed up according to the protocol below.

GROUP	CYSTOSCOPIC FINDINGS	MANAGEMENT
1	Initial solitary tumour. No recurrence at 3/12. (20% risk of recurrence at one year)	Annual fibreoptic cystoscopy
2	Initial solitary tumour and recurrence at 3/12	Three monthly cystoscopy for the first year, then 6 monthly cystoscopy if no recurrence within 12 months. Annual cystoscopy thereafter when the bladder remains clear for a further 2 years
3	Multiple tumours at presentation and/or recurrence at 3/12	Consider a course of intravesical chemotherapy followed by three-monthly cystoscopy until no recurrence for 12 months, then 6 monthly cystoscopic surveillance until the bladder remains clear for a further 2 years

Patients with uncontrollable low grade disease or those who develop high grade disease (G3) or CIS on subsequent biopsy should be referred to the SMDT

4.2 High Risk Superficial Disease (G3, pT1, CIS)

All patients with high-risk superficial disease should be discussed by the Specialist MDT (SMDT).

All patients with a pathological diagnosis of T1G3 disease should undergo early re-resection at 6 weeks unless there is a contra-indication to establish the clinical stage accurately.

Patients who on re-resection confirms high risk superficial disease only (ie no upstaging to muscle invasive disease) should be considered for primary cystectomy or intravesical BCG

Intravesical BCG based immunotherapy should be considered for patients who have CIS or confirmed T1G3 disease following re-resection. This should be given as 6 weekly intra-vesical instillations for 6 weeks followed by BCG maintenance where this is not limited by complications or side effects. Maintenance should be administered for a minimum of 2 years if tolerated. All patients should be considered for and included in cancer trials where these are available.

Patients who are found to have recurrent high risk disease after BCG treatment or muscle invasive disease at re-resection should have urgent cross sectional imaging staging scans (see section 4.3) and if they are not already being managed by the SMDT team they should be referred urgently to that team for consideration of radical treatment.

4.3 Muscle Invasive Disease (T2-T4)

All patients with muscle-invasive disease should be discussed at an SMDT with a view to consideration of radical treatment. They should then see and be managed by a designated uro-oncologist working with a specialist urological cancer team which includes a urological surgeon, anon-surgical uro-oncologist and a specialist urological cancer nurse. The time interval between diagnosis and initiation of radical treatment is important as there is a survival disadvantage to those patients whose treatment is delayed for 90 days or more following their initial diagnosis.

Patients should have cross sectional imaging of the abdomen and pelvis (either contrast CT or MR) and a CT of the chest prior to SMDT discussion.
All patients should have a full biochemical and haematological screen. Co-morbidity must be identified and appropriate investigations facilitating medical optimisation (cardiac / pulmonary function, metabolic screening) must be undertaken urgently.

A bone scan should be carried out if the Ca or ALP are abnormal or if the patient complains of bone pain.

Patients with invasive TCC without remote CIS, invasion in to the prostate or disease in the urethra should be considered for radiotherapy, chemo-radiotherapy or surgery. Open surgery with extended pelvic lymph node dissection is the standard of care, although laparoscopic removal of the bladder may be considered. Consideration should be given to the use of combination platinum based neo-adjuvant chemotherapy in these cases unless there are specific concerns or contra-indications.

Patients with invasive TCC with CIS remote from the tumour margin should normally undergo cystoprostatectomy ± neo-adjuvant chemotherapy if they are considered fit enough to tolerate the procedure.

Suitable patients being considered for cystoprostatectomy should be given the opportunity to discuss bladder reconstruction. Urethral biopsies or bladder

neck biopsy should be taken by the specialist cancer team if a neobladder is contemplated.

A urethrectomy should be performed in male patients undergoing cystoprostatectomy if the urethra or prostate is involved by tumour.

A standard lymph node dissection, removing all lymphatic tissue at least from the level of the mid- common iliac arteries distally should be carried out in patients undergoing cystoprostatectomy for curative intent unless they have had previous radiotherapy.

Evidence of counselling should be recorded clearly in case notes to include options discussed, complications and side effects of treatments. Patients should be seen by a urological cancer nurse and should also receive written information about their procedure. This information should include details of the treatment options and the nature and complications of the different procedures. A key worker should be identified for each patient to facilitate patient access for counselling and support.

5. Follow up after Treatment for Muscle Invasive Disease

All post surgical pathology should be discussed at the SMDT. Patients who are found to have involved lymph nodes at cystoprostatectomy or who have high risk characteristics (T3b or greater ± lymphovascular invasion) should be considered for adjuvant chemotherapy with combination platinum drug regimens. All patients should be considered for and included in cancer trials where these are available.

Patients who have had curative radiotherapy based treatment should have regular cystoscopic follow up. The first cystoscopy should be undertaken 4 months after completion of their radiotherapy. This should be undertaken under general anaesthetic and should involve biopsy of the tumour affected area and any other areas of suspicion. The anatomical bladder capacity should be recorded. In the event that tumour recurrence is detected in the bladder the patient's case must be discussed at an SMDT and consideration given to urgent salvage cystectomy.

Patients who are at high risk of recurrence after cystectomy should be considered for post-operative cross sectional scanning using an agreed departmental protocol.

Patients who undergo cystectomy should have regular long term renal function monitoring and systematic long term recording of their blood pressure. Consideration should be given to monitoring upper tract function and anatomy with diuresis renography in combination with cross-sectional and/or sonographic imaging modalities. High risk patients (multi-focality / CIS in the ureteric resection margin) should undergo interval urine cytology and be considered for interval surveillance imaging of their upper urinary tract.

Patients whose urethra is left in situ should undergo 6 to 12 monthly urethral washings for cytology or a similar frequency urethral inspection with a fibreoptic urethroscope.

<u>Management of Metastatic Disease</u>

Patients with metastatic bladder cancer presenting either as primary metastatic or local / metastatic recurrence following definitive curative therapy should be discussed at a specialist MDT and considered for palliative chemo or radiotherapy.

Patients must have access to a named uro-oncology nurse. All patients should be considered for and included in cancer trials where these are available.

6. Palliative Care

Patients with metastatic disease or those with muscle invasive disease who are not medically fit for radical treatment with surgery and / or radiotherapy should receive palliative support organised by the local or specialist MDT.

Palliative cystectomy or radiotherapy may be considered for patients who have uncontrollable haematuria or intractable local symptoms from their bladder.

Appendix

Specialist Bladder MDTs

Specialist MDT	Base Hospital	Local MDTs supported
Central Manchester	Manchester Royal Infirmary	MRI Pennine Acute Trust
Salford	Salford Royal Hospital	Salford Bolton Wigan Wythenshawe Trafford The Christie
Stockport	Stepping Hill	Macclesfield Tameside) Crewe Stockport

Core SMDT composition:

The following constitute the minimum SMDT core membership and each should be represented at every SMDT meeting.

Uro-oncological surgeon(s)
Clinical or Medical oncologist(s)
Specialist Uro-Radiologist
Specialist Histopathologist
Specialist Urological Cancer Nurse
SMDT coordinator