Guidelines for the Management of Penile Cancer

West Midlands Expert Advisory Group for Urological Cancer
This sheet is to accompany all documentation agreed by the West Midlands Strategic Clinical Network Expert Advisory Groups. This will assist the Clinical Network to endorse the documentation and request implementation.

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<td>EAG Chair</td>
</tr>
<tr>
<td></td>
<td>Network Clinical Director</td>
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Guidelines for the Management of Penile Cancer

1. Scope of the guideline

1.1 This Guidance has been produced to support the following:

   a) Management of patients with suspected penile cancer
   b) Management of patients found to have penile cancer.

2. Guideline background


3. Organisation of care for penile cancer

3.1 The Supra Regional centre for the management and specialist MDT discussion of penile cancer is at Heart of England NHS Foundation Trust. Adjacent SMDTs are in Leicester, Bristol and Manchester.

3.2 All patients should be discussed by the Supra Regional MDT. Most patients will be seen at HEFT. In some cases it may be appropriate for patients to be treated locally after discussion. These include:

   a) Those with carcinoma in-situ, which can be treated with topical agents.
   b) Patients with very advanced disease requiring palliative care only.
   c) Patients receiving radio-or chemotherapy, as agreed by the Supra Regional MDT.

3.4 If a patient refuses to travel to HEFT, treatment may be arranged locally. The Supra Regional MDT discuss the case.

4. Referral from GPs

4.1 Patients with suspected urological cancer should be referred from GPs to local urology units according to the NICE referral guidelines

4.2 Referrals deemed inappropriate by consultant urologists will be notified to the referring GP.

4.3 GPs will be notified of the diagnosis of cancer within 24 hours of diagnosis, and will be kept informed of all aspects of the patients care.

5. Multi-Disciplinary Teams (MDTs)

5.1 Each team (see section 3.2) will hold regular MDT meetings. All patients with proven urological malignancy will be discussed by a MDT. Normally this will be
the local MDT in the first instance, and the overall responsibility for the patient’s management rests with the local MDT until referral has been agreed.

5.2 In accordance with the Urology Improving Outcomes Guidance (IOG), patients with penile cancer or suspected penile cancer will be referred to the subspecialist penile cancer SMDT.

6. **Referral**

6.1 The most common presentations are a lump on the foreskin or glans, or bleeding or persistent discharge from behind the foreskin. Such cases should be referred as a 2 week wait to the local urology MDT.

6.2 Patients can be referred to the Supra Regional MDT at HEFT by the local MDT either before or after histological confirmation of the diagnosis (see also 7.1 below). Clinical details of all cases of penile cancer should be discussed at the Supra Regional MDT. Some patients may prefer referral to the Supra Regional MDTs in Leicester or Bristol.

6.3 The mechanism for referral to the Supra Regional MDT is normally by fax (0121 424 8952), for the attention of Mr Foster or a core member of the penile cancer SMDT. Cases can be discussed by phone if necessary. Relevant histology and imaging should be sent to HEFT.

7. **Diagnosis and staging**

7.1 Confirmation of diagnosis should be made by biopsy, which may be combined with definitive treatment. A biopsy is not necessary prior to surgical removal of obvious penile abnormalities.

7.2 CT of the groins, pelvis abdomen and thorax should be performed.

7.3 Staging is by CT, but this is unreliable with regard to inguinal lymph nodes (see below), especially in the presence of infection. Staging investigations should not hold up treatment of the primary tumour.

8 **Management of Primary Tumour**

8.1 Surgery provides the mainstay of treatment, with consideration for maintenance of the cosmetic appearance and function of the penis where possible. Glansectomy (with creation of a neo-glans using split skin grafts) and partial amputation with skin grafting should be employed where possible. In men with locally advanced disease in whom radical amputation is essential, consideration should be given to referral for formation of a neo-penis at a specialist centre (Leicester or University College Hospital London).
8.2 Radiotherapy should be offered where surgery is contra-indicated or the patient is extremely averse to surgery, but in such cases the patient should be warned of the inferior cosmetic results of radiotherapy in the long-term.

Treatment strategy is as follows:

a) T1, N0: tumour limited to the glans or prepuce: local electron beam irradiation.
b) T2, N0: tumour invading the corpora or deep invasion of the shaft: irradiation of the whole shaft of the penis.
c) T3, N0: tumour invading the urethra or prostate gland: may be considered for radical radiotherapy, however large volume disease may be most appropriately managed with palliative radiotherapy.
d) T4, inoperable nodal disease: consider palliative radiotherapy.

9 **Palliative radiotherapy**

9.1 Megavoltage irradiation to encompass gross disease to 20Gy in 5 fractions over 1 week; repeated depending upon response and tolerance to treatment.

10 **Carcinoma-in-situ (cis)**

10.1 Glans resurfacing may be appropriate in widespread cis; non-surgical approaches using 5 F-U cream or imiquimod should be considered initially.

11 **Management of patients with advanced inoperable disease**

11.1 Radiotherapy and/or chemotherapy using schedules such as Cisplatin + 5 Fluorouracil. Mitomycin C + 5 Fluorouracil may be considered as an alternative if renal function is impaired.

12. **Treatment of inguinal lymph nodes**

12.1 Clinical assessment and imaging of inguinal lymph nodes are unreliable. About half of enlarged nodes will be due to infection rather than metastatic tumour. Aspiration cytology should be used to confirm metastases.

12.2 If the nodes are clinically involved, treatment is with bilateral lymph node dissection, assuming no evidence of widespread nodal or metastatic disease. After such a procedure (and histological confirmation of nodal involvement) consideration should be given to prophylactic iliac node dissection.

12.3 Radiotherapy is reserved for incompletely resected disease. Block dissection with post-operative radiotherapy frequently causes lymphoedema. Prophylactic post-operative radiotherapy to iliac nodes should also be considered after resection of metastatic inguinal lymphadenopathy especially when multiple nodes
are involved or there is extracapsular spread. A dose of 45 Gy over 5 weeks is required.

12.4 Concurrent chemotherapy using combinations such as Cisplatin + 5FU may be considered to improve tumour control; this has not been addressed by a RCT and may increase lower limb and scrotal oedema. A boost of 20 Gy in 10 fractions over 2 weeks should be considered if there is residual disease.

12.5 If nodes are not obviously involved with tumour, bilateral prophylactic inguinal node dissection is relevant in certain cases. Patients can be stratified into low, medium or high risk depending on the primary histology:

a) low risk – Cis, ptag1/2 and pt1g1 – node dissection not recommended.
b) medium risk – T1G2 – node dissection or sentinel node biopsy may be advisable in patients with vascular and lymphatic invasion, or an infiltrating growth pattern.
c) high risk – pt2 or above, or any G3 tumours - node dissection indicated.

12.6 Patients should be counselled regarding the risks and benefits of lymph node dissection, as the procedure is associated with significant morbidity. Dynamic sentinel node biopsy is in development in the Supra Regional centre.

12.7 Prophylactic inguinal node irradiation remains unproven, doses of 45-50 Gy over 6 weeks are recommended where this is to be considered. Despite using lower doses than for primary disease, a risk of lymphodema remains.

13 Metastatic disease

13.1 Metastatic disease is normally treated with chemotherapy. Cisplatin + 5 Fluorouracil is the most commonly employed schedule. Mitomycin C + 5 Fluorouracil may be considered as an alternative if renal function is impaired. Palliative radiotherapy may be required for metastatic sites such as bone pelvic or para-aortic lymphadenopathy.

14 Follow up

14.1 Follow up is the responsibility of the team that managed the primary treatment, with regular, timely communication with the referring team. If the patient has been referred for primary treatment to the specialist team, follow-up by the referring team might be appropriate at a later date if both teams and the patient are in agreement. Long-term follow-up in primary care is appropriate if the patient’s condition is stable.

14.1.1 Lymphoedema and wound dehiscence are particular problems after groin dissection. Easy access to the lymphedema nurse specialist should be provided.

14.2 Most patients require the following follow up; those with a high risk of recurrence may require more frequent monitoring.
a) 3 monthly for the first 12 months
b) 6 monthly thereafter to 5 years

14.3 For patients with high risk tumours who elect not to have node dissection, more frequent follow up (every 6 weeks) with clinical examination should be arranged during the first 6-12 months.

14.4 CT scanning should be performed at initial staging, but is not normally indicated for follow up in routine cases without nodal involvement unless there is a particular suspicion of metastatic disease. If there is nodal disease at presentation follow-up imaging will likely be necessary but frequency will be individually determined and depends on treatment options.

14.5 Follow-up for patients with advanced or metastatic disease requires an individual approach, with referral to palliative care teams as required.

15 **Recurrent/progressive/metastatic disease**

15.1 In the case of local recurrence or local progression after radical treatment consideration should be given to re-staging and treating with further radical therapy (radiotherapy or surgery).

16 **Patient information and counselling**

16.1 All patients, and with their consent, their partners will be given access to appropriate written information during their investigation and treatment, and on diagnosis will be given the opportunity to discuss their management with a clinical nurse specialist who is a member of the relevant MDT. The patient should have a method of access to the urology team at all times.

16.2 Access to psychological support will be available if required. All patients should undergo a Holistic Needs Assessment and onward referral as required.

17 **Palliative care**

17.1 Palliative care services will be made available to all patients as deemed appropriate by the MDT.

18 **Clinical trials**

18.1 Wherever possible, patients who are eligible should be offered the opportunity to participate in National Institute for Health Research portfolio clinical trials and other well designed studies.