Lymph node status[1-8] (Required)

Reason/Evidentiary Support

Nodal involvement is a recognised predictor of poor prognosis. In node positive disease, the number of positive nodes, the presence of extracapsular spread (ECS) and the level of nodal involvement (pelvic versus inguinal) have been shown to influence survival by multivariate analysis and this is reflected in TNM7[1,9] and TNM8[10] which classify any pelvic lymph node involvement or extracapsular extension of any regional lymph node (inguinal or pelvic) as pN3 in the penile but not in the urethral TNM. However in penile TNM8[10] the number of nodes which stratifies the staging between N1 and N2 is two or more unilateral nodes rather than one or more in TNM7.[1,9] The extent of inguinal lymph node involvement including number of nodes involved and presence or absence of ECS is used to determine the need for pelvic node sampling or excision.

The size of the largest nodal tumour deposit (not the lymph node size) must also be recorded as there is evidence that this may affect prognosis in penile cancer. Both TNM7 and TNM8 classify very small amounts of tumour as micrometastases (up to 0.2 mm)[1,9-11] and isolated tumour cells as N0 (i+).[10] However there is no evidence for a prognostic cut-off point for lymph node metastasis size in penile cancer so it is recommended in that maximum dimension of largest tumour deposit is recorded and tumour deposits over 0.2 mm staged as N1.

For urethral cancer in TNM7[1,9] the size of metastasis in a single regional node, if greater than 2 cm, stratifies between N1 and N2 nodes or if there are multiple nodes involved, but in TNM8[10] there is no metastasis size specified and the only stratifier is between single and multiple regional nodes.

Tumour presence or absence, size of tumour deposit and presence or absence of ECS are reported separately for each individual node site in both nodal resections and sentinel nodes. Occasionally individual tumour cells are identified in the peripheral sinus. The significance of these is uncertain but they should be described within reports. Immunohistochemistry is essential for the assessment of sentinel lymph nodes. Dynamic sentinel node biopsy, using either the blue dye technique or lymphoscintigraphy, refers to the intraoperative identification of the first node draining the tumour. It relies on the assumption that lymphatic spread is a stepwise process, so that, if the sentinel node is negative, further nodal dissection would yield negative results. This technique may be used in some centres for patients with no clinical signs of nodal involvement.

Although the N categories differ for P(p)enile and U(u)rethral primary tumours it is recommended that data items as specified in this section are recorded for tumours of both these primary sites as tumours of the distal, as opposed to proximal, urethra appear to spread in the same way to local lymph nodes as do those of the penis.

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