

3. Guidelines for Reporting Bladder Cancer, Prostate Cancer and Renal Tumours

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INDEX

CONTENT	PAGE NUMBER
3.1 Guidelines for reporting of bladder tumours.....	62
3.2 Guidelines for reporting of prostate cancers.....	64
3.3 Guidelines for reporting of kidney tumours.....	67

3.1 Guidelines for reporting of bladder tumours

3.1.1 Introduction:

These guidelines apply to the reporting of transitional cell (urothelial) carcinomas of the bladder. Transitional cell (urothelial) carcinomas account for 90% of tumours in the bladder. Similar principles may be applied to the reporting of other mucosal malignancies of the bladder including squamous cell carcinoma, adenocarcinoma, carcinosarcoma and undifferentiated carcinoma.

The guidelines are presented as a proforma that lists the core data item. The proforma may be used as the main reporting format or may be combined with free text as required.

3.1.2 Description (Category X)

- Bladder chippings should preferably be weighed (category Y). The aggregate measurement of the chippings should be given if this is not possible (Category Y).

3.1.3 Sampling (Category X)

- Unless a large quantity of tissue has been submitted all the material sent should be embedded. If sampling is required the more solid portions of tissue present should be processed to give 6 blocks.

- If the bladder base is sent separately, this should be processed completely.
- For small biopsies multiple levels should be examined.

3.1.4 Recommendations to surgeons

(category X)

Chippings from the bladder base should be sent in a separate container.

3.1.5 Microscopy and conclusion (category X)

- Tumour type
- WHO (year) Grading
- Growth pattern (solid, papillary)
- Lamina propria invasion
 - Core of papilla
 - Base
- Invasion of the muscularis propria : If the muscularis propria is not present in the specimen this should be stated.
- Vascular invasion
- Non-neoplastic urothelium : If non-neoplastic urothelium is not present in the specimen this should be stated.
- Pathological tumour stage : TNM* classification

*if pT2, state it as “at least pT2”.

3.2 Guidelines for reporting of prostate cancer

3.2.1 Introduction:

These guidelines apply mainly to the reporting of small acinar adenocarcinomas of the prostate. Small acinar adenocarcinomas are the commonest histological type of prostatic carcinoma. Similar principles may be applied to the reporting of other malignancies of the prostate including large duct carcinoma, transitional cell carcinoma and squamous cell carcinoma, but these will not have a Gleason grading.

The guidelines are presented as a proforma that lists the core data item. The proforma may be used as the main reporting format or may be combined with free text as required.

3.2.2 Macroscopy (Category X)

- Mention the following for core biopsies
 - Number of specimens with site if provided
 - Number of cores in each container and the length in mm.(Colour the cores with eosin)
Specimens from each region should be embedded separately (multiple levels should be examined)
- Prostate chippings should be weighed (category Y)

3.2.3 Sampling

If the chippings weigh less than 12 grams sample the entire specimen. If they weigh more one block should be taken for every 5 grams of tissue.

3.2.4 Microscopy (Category X)

- Specimen type
- Tumour type
 - Small acinar
 - large duct.
 - Other
- Gleason sum score (predominant pattern & second dominant OR worst pattern)****
- Tumour burden (percentage involvement of each core) OR PPBC
- Presence of perineural invasion
- Presence of high grade PIN
- Presence of any other pathology

Foot note-

- PPBC: This is the number of cores that contain tumour expressed as a percentage of the total number of cores.
- If there is neuroendocrine differentiation this should be mentioned.

Please note-

It is not recommended to diagnose Gleason grade 1 and 2 in core biopsies.

3.2.5 Recommendation to the surgeon

Each core should be placed on a filter paper.

3.3 Guidelines for Reporting of Kidney Tumours

3.3.1 Introduction:

The guidelines are presented as a proforma that lists the core data item. The proforma may be used as the main reporting format or may be combined with free text as required.

3.3.2 Macroscopic examination (Category X)

- State whether it is the left or right kidney
- Measure the dimensions of the entire gross specimen and that of the kidney. State the length of the attached ureter.
- Weigh the kidney: This will be especially for kidneys with Wilms tumour.
- Mention the presence or absence of perirenal fat, Gerota's fascia, adrenal gland and the renal vein.
- Cut open the renal vein longitudinally to demonstrate if there is tumour invasion.
- Paint the outer surface of the specimen.
- Bisect kidney through the hilum longitudinally.
- Describe the location, size and appearance of the tumour.
- State whether there is macroscopic involvement of the the renal vein, renal capsule, renal pelvis, Gerota's fascia, perirenal fat and adrenal gland by the tumour.
- Mention the number of perihilar nodes.

3.3.3 Blocks (Category X) :

- Sample the tumour adequately
- Obtain blocks to demonstrate, tumour involvement of renal capsule, Gerota's fascia, perinephric fat, renal pelvis and hilar fat (mainly for central tumours)
- Ureter- resection end (also every 1 cm of ureter for suspected urothelial carcinoma).
- Renal vessels
- Perihilar nodes
- Adrenal glands
 - Perirenal fat should be sampled even where there is no macroscopic invasion by the tumour

3.3.4 Microscopy and conclusion (Category X)

- Specimen: Mention if it is a radical nephrectomy or not
- Tumour type:
- Tumour site:
- Tumour size:
- Nuclear grade (Fuhrman Nuclear Grade)

GX Cannot be assessed

G1 Nuclei round, uniform, approximately 10 μ ; nucleoli inconspicuous or absent

G2 Nuclei slightly irregular, approximately 15 μ ; nucleoli evident

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- G3 Nuclei very irregular, approximately 20 μ ; nucleoli large and prominent
- G4 Nucleoli bizarre and multilobated, 20 μ or greater, nucleoli prominent, chromatin clumped
- Tumour involvement of
 - renal vein and its muscular tributaries,
 - Renal capsule,
 - perirenal fat,
 - Gerota's fascia and whether the tumour extends beyond Gerota's fascia.
 - Vascular invasion
 - Resection margins (renal parenchymal margin [for partial nephrectomy], ureter, renal vein and artery)
 - Involvement of adrenal glands
 - Regional lymph nodes (pN)
 - Number examined
 - Number involved

Footnote:

For Wilms tumour – mention the percentage of necrosis, percentage of the three components (blastemal, mesenchymal, epithelial) and whether anaplasia is present or not.

3.3.4 Recommendations to the surgeon

(Category X)

The surgeons should mark the

- renal vein with a long suture.
- renal artery with a short suture

They should mention whether the adrenal gland and Gerota's fascia are included in the specimen.

The kidney should not be bisected.