

Genitourinary Grossing Guidelines

Specimen Type: RADICAL PROSTATECTOMY

Procedure:

1. Orient the specimen - identify apex (with distal urethra), base (with bladder neck, usually has a cauterized jagged surface), anterior aspect of gland (bulging), posterior aspect of gland (relatively flat), seminal vesicles and vasa deferentia (posterior basal aspect)
2. Weigh the specimen and measure the prostate gland, left and right seminal vesicles, and vasa deferentia.
3. Ink the surface without getting ink into the urethral canal:
 - a. left-blue
 - b. right-black
 - c. anterior stripe- yellow
 - d. posterior stripe- red** Fix the colors with vinegar, pat dry
4. Take sections of the margins and seminal vesicles:
 - a. **Apical margin** --- amputate a 4 mm thick 'cone' with the urethral orifice in the center. Lay this section flat on the board. Cut into left and right halves, through the urethral orifice. Bread-loaf the margin in 2 mm interval and submit on edge.
 - b. **Bladder neck margin** --- amputate a 3 mm thick slice around the urethra to include the entire cauterized bladder neck margin and the mucosa-ink junction. Bread-loaf the slice in 2 mm interval and submit on edge.
 - c. **Vas deferens margins** – remove the tips of vas deferens and submit en face.
 - d. **Seminal vesicles**---Amputate the seminal vesicles and vas from the prostate gland. Transversely section the base of each seminal vesicle near its junction with the prostate.
5. Section the prostate gland
 - a. Serially transverse section the prostate, base to apex, perpendicular to the posterior surface.
 - i. **Note that transverse level 1 will be nearest to the BASE**
 - b. Each section should be about 3 mm in thickness.
 - c. Lay each section on the towel, from base to apex, maintaining left, right, anterior and posterior orientation, with the basal surface of each slice facing up.
6. Examine the sections for tumor: in the fresh state, tumor is more easily identified by palpation (palpate posterior aspect of slices) than by visualization (tumor will look tan-yellow grossly); also look for areas of asymmetry and nodularity in transition zones (flanking the urethra) consistent with benign prostatic hyperplasia.
7. Submit sections of prostate.
8. Wrap any leftover sections from base to apex, as you may have to go back to the bucket (i.e., keep specimen oriented).

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9. When submitting tissue to TPCL, do not submit the peripheral capsule in the event that this tissue needs to be submitted at a later time for proper staging and margin assessment.

Gross Template:

Labeled with the patient's name (***), medical record number (***), designated "****", and received [fresh/in formalin] is a *** gram intact radical prostatectomy (to exclude bilateral adnexa). The prostate measures *** cm (lateral left - lateral right) x *** cm (apex - base) x *** cm (anterior - posterior). The external surface is smooth and grossly intact with focal areas of cautery artifact at the bladder neck margin. The grossly unremarkable bilateral seminal vesicles and vasa deferentia weigh *** gm in aggregate. The right seminal vesicle measures *** x *** x *** cm and the left seminal vesicle measures *** x *** x *** cm. The bilateral vasa deferentia are grossly unremarkable. The right vas deferens measures *** cm in length x *** cm in diameter and the left vas deferens measures *** cm in length x *** cm in diameter.

The prostate is serially sectioned from base - apex into *** transverse levels to reveal [*diffuse periurethral nodularity, prominent nodules, fibrosis, lesion*]. The [*prominent nodule/lesion*] area is located in the [*left/right, anterior/posterior, central/peripheral*] aspect and measures *** cm from the inked surface.

The apex and bladder neck margins are shaved, serially sectioned and entirely submitted. Representative sections (totaling approximately ***% of the prostate) are submitted for permanent sections.

Ink key:

Black	right
Blue	left
Yellow	midline anterior
Red	midline posterior

Cassette Submission:

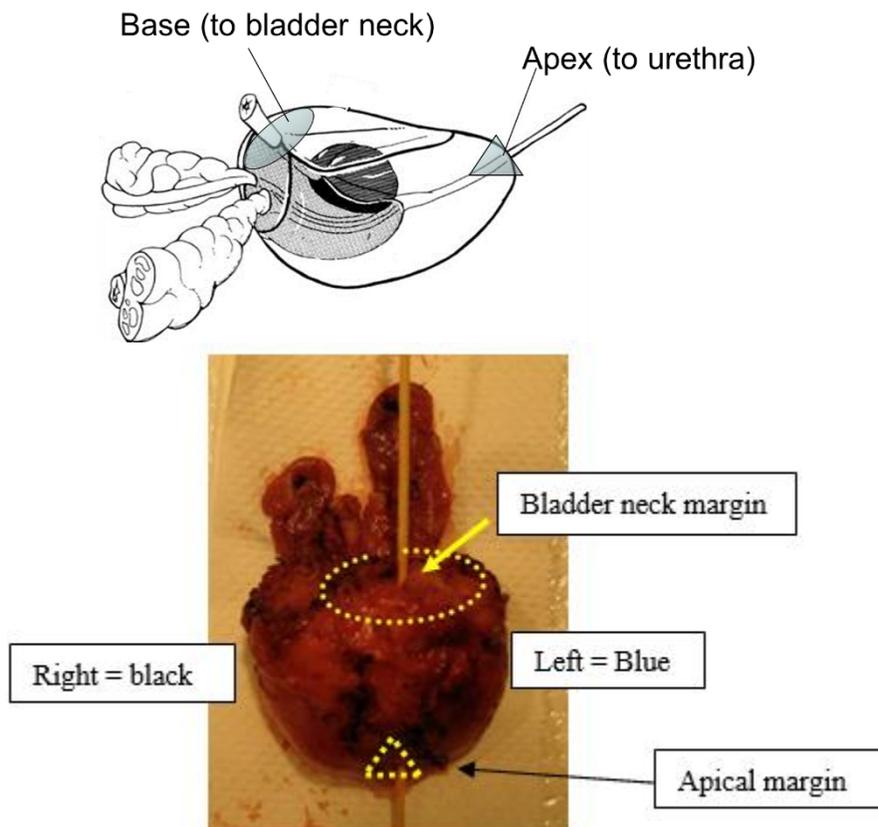
A1- right prostatic base margin, perpendicular
A2- left prostatic base margin, perpendicular
A3- right apex margin, perpendicular
A4- left apex margin, perpendicular
A5- base of right seminal vesicle
A6- base of left seminal vesicle
A7- right and left vas deferens margins, en face
A8- level ___, whole mount section
A9- level ___, whole mount section
A10- level ___, whole mount section

Tissue submission:

- When submitting tissue to TPCL, do not submit the peripheral capsule in the event that this tissue needs to be submitted at a later time for proper staging.

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- If prostate weighs less than 40 grams → submit the central portions of two levels to TPCL, save the peripheral capsules in the container, submit the remaining prostatic tissue for diagnosis (typically there can be between 4 or 5 levels submitted for routine processing after research tissue has been released).
 - o If no tissue is released to TPCL, you can submit 5 levels for routine processing. Check the patient's clinical history to determine where tumor is located which can guide you to determine which levels to submit.
- If prostate weighs 41 grams or greater → submit the central portions of two levels to TPCL, save the peripheral capsules in the container, submit 5 transverse levels and 1 additional transverse level per every additional 15 grams of prostate.



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