

Prostate, Radical Prostatectomy

(5.5 Prostate); Created October 27th, 2019 by Jeremy Deisch, MD; updated July 25th, 2022 by Jeremy Deisch, MD

SAMPLE DICTATION

(Labeled: ____, ____, ____) Received ____ [fresh / in formalin] is a __ gram, __ x __ x __ cm prostate with attached seminal vesicle and vas deferentia. The right seminal vesicle measures __ x __ x __ cm, the left seminal vesicle is __ x __ x __ cm. The right vas deferens measures __ x __ x __ cm, the left __ x __ x __ cm. A __ x __ x __ cm dominant mass is present within the [right, left / superior, mid, inferior / anterior, posterior] part of the prostate gland. The background prostate gland is [homogeneous, multinodular].

Specimen Handling: (RS , ____ caps) Ink Key: Blue = right side of specimen, Black = left side of specimen

SUGGESTED SAMPLING

- 1: Right apex, serially sectioned
- 2: Left apex, serially sectioned
- 3-6: Distal section, quadrisected
 - 3: Right anterior
 - 4: Right posterior
 - 5: Left anterior
 - 6: Left posterior
- 7-10: Mid section, quadrisected
 - 7: Right anterior
 - 8: Right posterior
 - 9: Left anterior
 - 10: Left posterior
- 11-14: Proximal section, quadrisected
 - 11: Right anterior
 - 12: Right posterior
 - 13: Left anterior
 - 14: Left posterior
- 15: Right base, serially sectioned
- 16: Left base, serially sectioned
- 17: Right seminal vesicle, with vesicle/prostate interface, vas deferens
- 18: Left seminal vesicle, with vesicle/prostate interface, vas deferens
- 19: Neurovascular bundle, left [sample as perpendicular margin]
- 20: Neurovascular bundle, right [sample as perpendicular margin]

STAGING CRITERIA (AJCC 8TH EDITION)

- Pathologic tumor staging is based upon the extent of involvement of the prostate gland and surrounding structures. Earliest stage tumors (pT2) are confined to the prostate gland, pT3a tumors invading periprostatic adipose tissue or bladder neck, pT3b tumors invade the seminal vesicles, pT4 tumors invading adjacent pelvic structures

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ADDITIONAL CONSIDERATIONS

- The neurovascular bundles lie at the posterolateral aspect of the prostate gland. Small blood vessels entering the fascia are often observed in this area. In tumors with prominent perineural invasion, this is a common site of margin involvement. Sample these areas as perpendicular margins.
- Prostatic adenocarcinomas are often not grossly evident; the majority of times “tumors” that are seen grossly are benign hyperplastic nodules in the context of benign prostatic hyperplasia (BPH). Tumors are best sampled by systematically sampling of the prostate gland as described above.
- Occasionally, prostatectomy specimens are performed on cases with only small volume (single core) malignancy. If no carcinoma is seen at the time of initial sampling, repeat sampling will be required to identify the malignancy. Correlation with the presurgical biopsy results showing the site of cancer will be used to completely sample the area of known malignancy.
- Sections of prostate gland must be sectioned thin. Sections that are too large or too thick will not process well, and will have to be re-processed, a waste of time for both the person grossing and histology staff.

