Whole Mount Prostates

“Putting the Puzzle Back Together”
Maegan Weighman
Matt Gabbeart
Dr. Kunju
Whole Mount Prostates

Goal: Reduce grossing time, # of cassettes, and Pathologist review time.

Regular Cassettes
- 12-16 cassettes
- Processing time 8-12 hrs.
- Cutting time: 40-50 min.
- Dictation time:

Whole Mount Cassettes
- 3-4 cassettes
- Processing time 16 hrs.
- Cutting time: 30-40 min.
- Dictation time:
  - Implemented 1 case/day 2-6-12. Now doing 2 cases/day.
The Prostate Gland

- 20-30 grams, funnel shaped, 4 x 3 x 2 cm.

- Located within the pelvis between bladder base and penis.

- Function: conduit for urine, adds nutritional secretions to sperm to form semen during ejaculation.

- Vasa deferentia bring sperm from the testes to the seminal vesicles. The seminal vesicles contribute fluid to semen during ejaculation.
Prostatectomy Grossing 101

- Measure
- Weigh
- Ink (follows same color scheme: right-green, left-blue, base-yellow, black-anterior)
Prostatectomy Grossing 101

- Remove sutures and staples.
- Ink any exposed parenchyma red (indicates false margin)
Prostatectomy Grossing 101

• Amputate seminal vesicles and vasa deferentia.
• Serial section for abnormalities.
Prostatectomy Grossing 101

- Transect bladder base (proximal urethral margin)
- Radially section around urethra
Prostatectomy Grossing 101

• Transect apex (distal urethral margin)
• Radially section around urethra
Prostatectomy Grossing 101

- Section the remaining gland from base to apex (superior to inferior), 5mm or less in thickness
- Remove any residual staples or calculi
**Prostatectomy Grossing 101**

- Lay out all slices in proper order from base to apex (Slice 1, 2, 3, etc.)
- Make note of any distinct lesions
- Every other slice will be submitted for histological evaluation
Prostatectomy Grossing 101

• With the remaining slices, core out the central parenchyma and submit the capsule.
• Place all saved tissue in formalin
Prostatectomy Grossing 101

- Cassettes should be in order according to template
- Double check to make sure all cassettes have correct accession #, part #
Pros & Cons

• Grossing
  + Less cassettes to work with
    + Grossing time is about the same for glands < 70 grams
    + Grossing time is reduced significantly for glands >70 grams
      ✓ Printing out individual cassettes 1K1, 1K2, etc.
      ✓ Long dictations with complex numbering schemes
      ✓ Diagrams
    - “Shatter” effect on the slide due to the main slices not being properly flattened in the cassette during processing (inserts should fix issue)
    - Hand print all cassettes

• Histology
  + Less cassettes.
    - Embedding and cutting requires a little more technique.
    - Glass coverslips

• Pathologist Review
  + Same quality of care
  + Evaluation of size, location and number of tumor nodules is easier and results in a more accurate assessment for staging = NO JIGSAW PUZZLES!
  + Slides cut on same level
  + Less slides
    - TAT has suffered slightly due to implementation of new process and training.
Standard Cassettes
Standard Cassettes
Whole Mount Cassettes