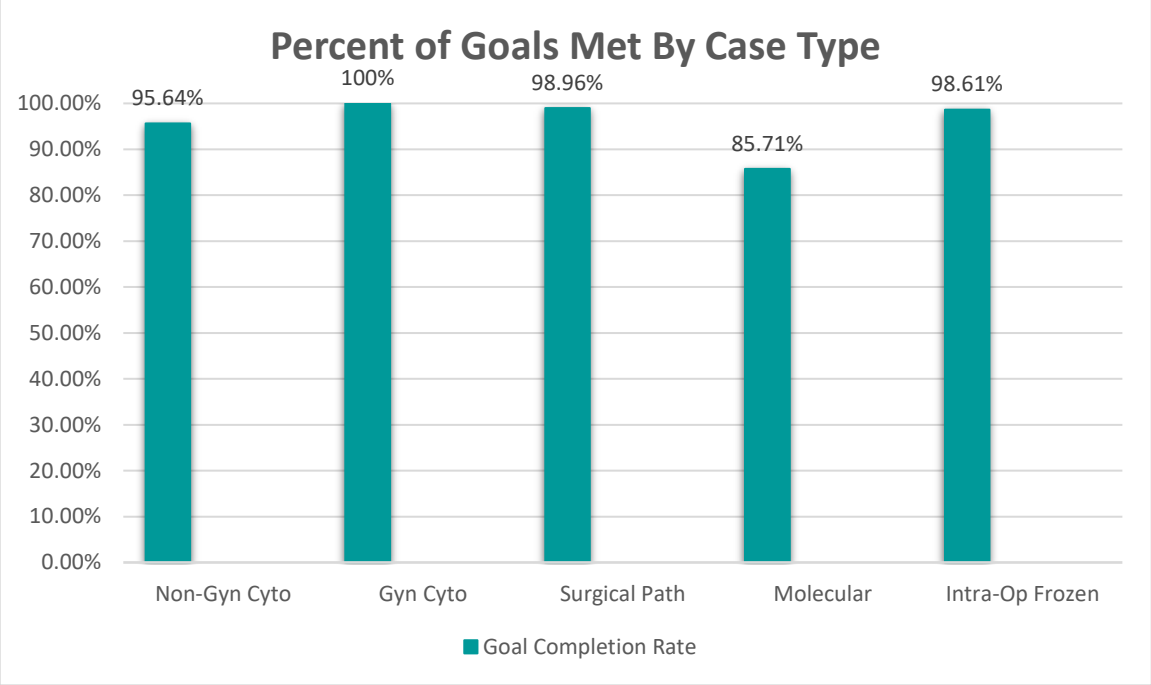
Associates in Pathology Quarterly Newsletter

10/17/2023 Volume 3, Quarter 3



Quarter 3 In Review

At Associates in Pathology, one of our main points of focus is case turnaround time (TAT). TAT for pathology specimens is an indicator of efficiency. TAT affects coordination of patient care, which in turn impacts satisfaction of both physicians and patients. We handle a variety of case types, each with their own TAT guidelines. Non-Gynecologic Cytology, FNAs, and Surgical Pathology cases have a goal of 90% signed out within 2 working days, Molecular cases are within 3 working days, and Gynecologic Cytology (Pap Smears) are within 7 working days.

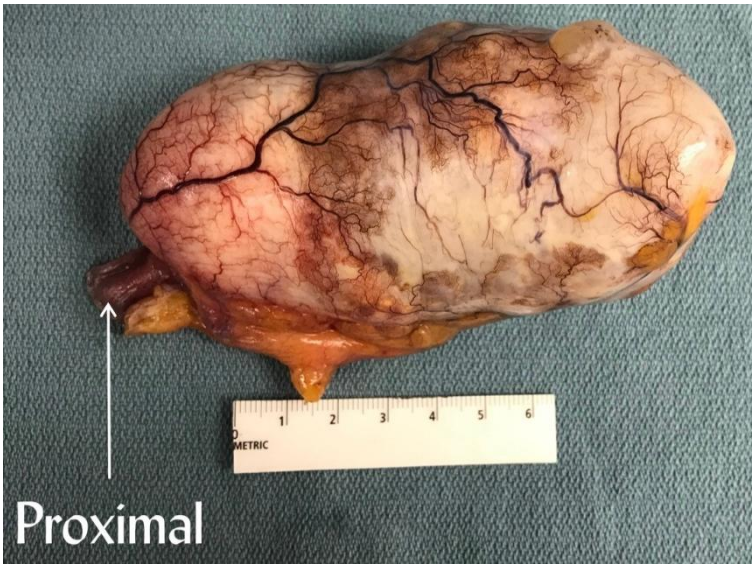
Frozen section analysis is an essential tool utilized during surgery by offering the surgeon a rapid diagnosis; therefore frozen section TAT has direct impact on patient's therapy and safety during/after surgery. With respect to our Intraoperative Single Frozen Sections, we strive to have a call back to surgeons in 20 minutes or less.

The chart above reviews AIP's TAT for 2023 Quarter 3.

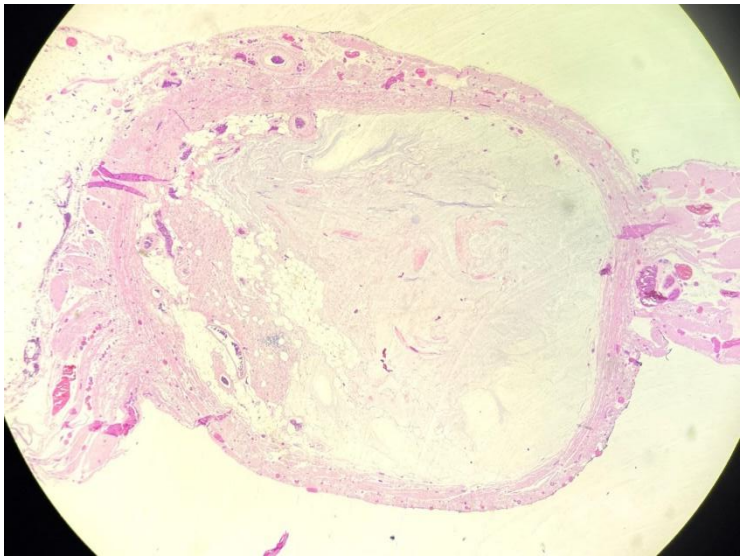
INTERESTING CASE OF THE QUARTER:

Appendiceal Mucinous Neoplasm

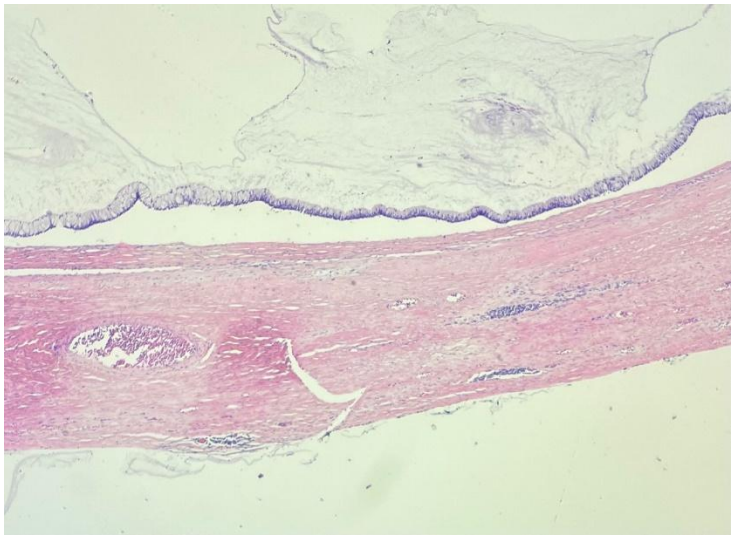
- Received to AIP laboratory- 192 gram, 12.5 cm long x 0.6 to 5 cm in diameter grossly intact appendix
- Serosa is distended with apparent vessels
- The proximal 2 cm of appendix is not distended
- Opening reveals a lumen filled with yellow-tan mucoid material
- Diagnosed as low-grade appendiceal mucinous neoplasm, confined to appendix (G1, pT3)
    - Acellular mucin extends into subserosa or mesoappendix but does not extend to serosal surface
    - Acellular mucin at proximal margin



Picture 1: Photograph of intact distended appendix demonstrating normal appearing proximal margin.



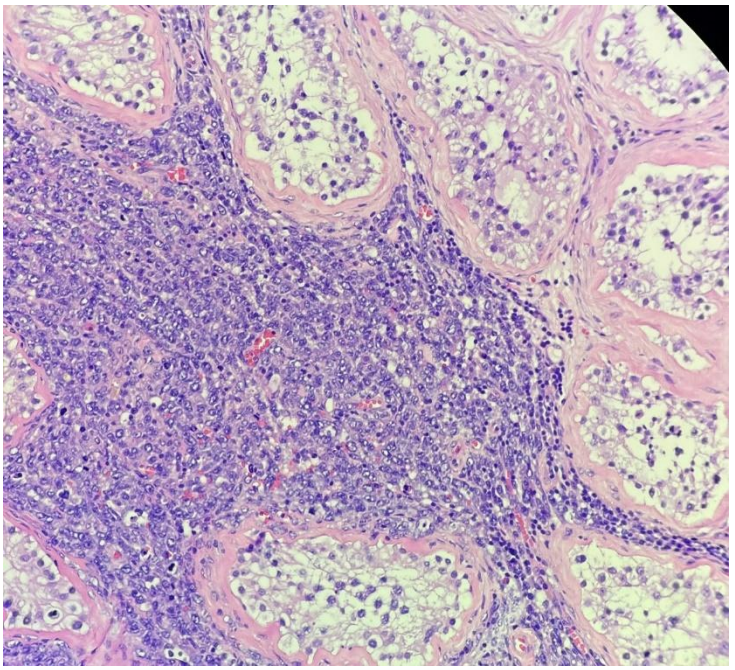
Picture 2: H & E of appendix lumen cross section filled with mucin.



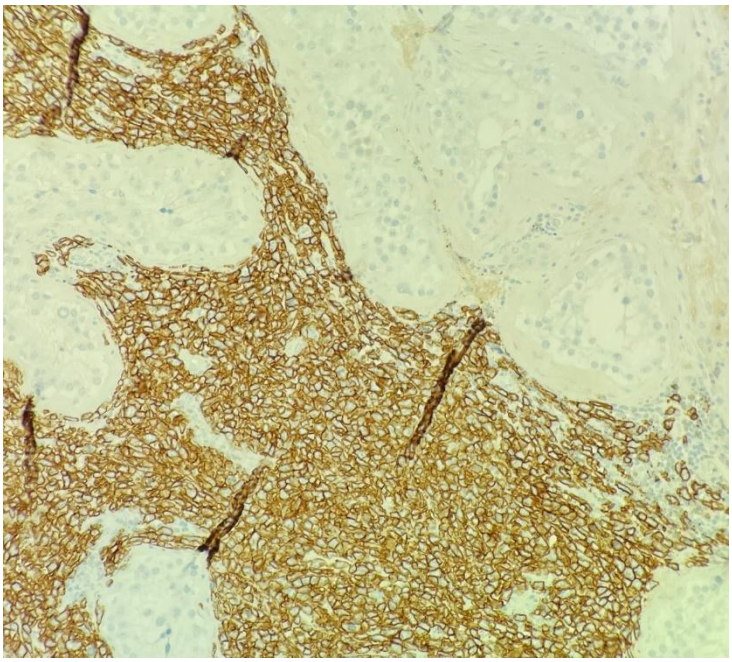
Picture 3: H & E of appendix wall with mucin and epithelium.

INTERESTING STAIN OF THE QUARTER: CD20 IMMUNOHISTOCHEMICAL STAIN

- B-cells- type of white blood cell called lymphocytes
    - Make antibodies against harmful pathogens
    - Can remember specific antigens to allow immune system to launch effective defense if pathogen enters body again
- CD20- membrane embedded surface molecule
    - Plays role in development and differentiation of B-cells into plasma cells
- CD20 IHC stain determines presence of CD20 on cells
    - CD20 remains present on most B-cell neoplasms while remaining absent on otherwise similar appearing T-cell neoplasms
    - Can be very useful in diagnosing B-cell lymphomas and leukemias.



Picture 1: Testicle with seminiferous tubules infiltrated by large, markedly atypical cells.



Picture 2: CD20 IHC stain highlights entire atypical cell population, indicating a B-cell lineage. These findings support the diagnosis of diffuse large B-cell lymphoma (DLBCL).