**Objectives**

- Demonstrate how to provide effective PA – CT feedback for Non GYN cytology
- Identify few case scenarios that warrant PA – CT feedback - LHSC cases
- Share an objective QA method to monitor CT-PA Discrepancy in Non GYN cytology – Pittsburg Medical Centre method

*We see this as an educational QA activity and not as a performance indictor*

**Introduction**

- Over the years we have seen valuable QA monitors/performance indicators introduced for Gyn cytology
- Relatively fewer QA monitors/performance indicators for non GYN cytology
  - Cyto-histologic correlation, main focus
    - A powerful method but with limitation
Cytotechnologist

- CTs are First Line screeners/interpreters. Their level of performance and contribution have direct impact on the efficiency and accuracy of the tests/laboratory
- GYN cytology is less complex compared to non GYN cytology
- There is increasing complexity in Non GYN cases, ongoing education and one on one feedback are valuable and needed.

Next Generation Cytopathology Practice

- ROSE procedure
- Interpretation of cell block
  - H&E, thin needle cores
- Understand basics of biomarker testing
- Look up FCM report on Lymph node FNABs
- Look up biochemical test results on FNABs
  - PTH, Thyroglobulin

Are CTs adequately trained for these continuing special needs?

How do we improve proficiency of CTs in Non Gyn cytology?
Role of Non GYN Discrepancy Analysis

• An important post-analytic QA measure
  – Promotes consistency in our overall cytopathology practice
  – Provides opportunity for feedback from pathologist to cytotechnologist
  – Not straight forward: needs innovative ideas

Non GYN Discrepancy Analysis

Challenges

• Non GYN cytology is more complex
  – Still lack of standardized diagnosis for certain body sites
  – “Gray zone” diagnosis at times
  – Multiple diagnostic categories – thyroid

• Clinical management of atypical diagnosis may be different from organ to organ

Non GYN Discrepancy Analysis and Feedback Challenges

• Discrepancy analysis method is not standardized by CLIA/CAP or IQMH, inter-lab comparison of discrepancy data are not available or meaningful
• Literature review: minimal info on Non GYN Cytology discrepancy methodology
• IQMH requirement, VI.1 Analytical CY022: there is a mechanism for feedback on case material to the pathologist to the cytotechnologist; if screening by cytotechnologists and sign out by pathologist is done at different geographic sites, the laboratories shall ensure a mechanism for feedback in communication between the individuals involved in the process, to ensure high quality diagnosis outcomes.
PA – CT Discrepancy Feedback Methods (LHSC)

Case by Case Discrepancy Feedback
- Direct Feedback - best method
  - professional, collegial manner
- Using a feedback form - effective method

Scheduled Multi-head Microscope Rounds - Educational Value

An Objective QA Method for Discrepancy Analysis

Discrepancy Analysis: Non GYN Cytopathology
by Stephen Raab and Paul Ohori
Pittsburg Medical Centre

Diagnostic Cytopathology 2006
34:4;265-271
Non GYN Discrepancy Analysis and Feedback

Susan McRae, MLT, ART, CMIAC, M Med Sci (Cytol)
Senior Cytotechnologist, LHSC

Objectives

• Tips for giving effective feedback
• Identify a few major discrepancy scenarios
• Analysis and application of the Pittsburg Method

Effective One-on-One Feedback

• Starts with Collegial Behaviour
• In a quiet environment away from others (pathologist’s office)
• In a professional manner, proper communication

4 Easy Steps to Effective Feedback
• Step 1: Ask if you can give feedback. Starts with: “May I give you some feedback?”
• Step 2: Describe the specific behavior. Starts with: “When you…”
• Step 3: Describe the impact of the behavior on self or others. Starts with: “Here’s what happens when…”
• Step 4: Next Steps o Starts with: “What can you do differently?” or “Thank you, keep it up!”
• Give positive as well as negative feedback
Additional Tips for CTs

- Independent follow up of cases
  - Record case number and review final sign out diagnosis
  - Follow up on difficult ROSE interpretation cases
  - Learn from surgical pathology follow up
- Consult with PA on difficult cases
  - Review slides (cell blocks, challenging morphology)
  - Open door policy
- Cytology rounds — discuss challenging cases

Non GYN Major Discrepancies Examples

- False negative
  - Pleural fluid, single cell adenocarcinoma screened as negative for malignancy
  - Pleural fluid Melanoma screened as negative/atypical
  - Pleural fluid Myeloma cells screened as negative/atypical

An Objective QA Method for Discrepancy Analysis

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Diagnostic Cytopathology 2006 34:4:265-271
Pittsburg Discrepancy Analysis Method

- Numerical value given to Non Gyn diagnostic categories
  - Based on institution’s probability of malignant outcome

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- Discrepancy defined as “CT interpretation minus PA’s diagnosis”
  - Defines minor and major discrepancies
    - Minor discrepancies categorized as interpretive or screening error
    - Senior CT reviews cases with CTs as needed

- Final result reviewed by Cytology Lab Director
- Data result is used as a performance indicator in Pittsburg Medical Centre

LHSC Urine Cytology Lab Discrepancy Analysis
January – June 2019

Concordance 2757 (95%)

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Discordance 150 (5%)

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Limitations:
- Does not discriminate screening issues from interpretive issues.
- Time consuming manual analysis by senior CT

Comparison of Experienced Cytotechnologists

Senior

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Junior

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Pittsburg Method: Benefits

• True value of this method lies in the subsequent discussion of cases with major discrepancy among CTs and Pathologists
• Data becomes useful when new CTs are hired to compare their performance to that of the overall laboratory.

Our Thoughts ..........

• Effective PA-CT feedback is an important post-analytic educational QA activity
  – Promotes consistency in our overall practice
  – Promotes communication, education and getting all of us to work together

Your Thoughts ........

• Do you think analysis of agreement rate between cytotechnologist and pathologist constitute value added work?
• In this regulatory environment, should this be used as an optional post-analytic Quality Metrics in local laboratories i.e., at their discretion?
Discussion

• Share your experience