Decreasing the rate of insufficient Pap Smears amongst OBGYN residents in an academic training environment

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Disclosures

• Relationship with HOLOGIC who developed and holds rights to the didactic material for the resident intervention
• No financial relationship or endorsements exist with HOLOGIC
Background

• The Papanicolaou test (Pap Smear) is used as the primary cervical cancer screening tool and detects abnormal cervical cytology.

• 2% of pap smears are insufficient/unsatisfactory

• Unsatisfactory results ➔ missed diagnoses, ↑ in healthcare costs, patient inconvenience

• Common reasons: red blood cells, vaginal atrophy, inflammation, and provider error
Objective

At University Medical Center New Orleans (UMCNO) providers noted an increased rate of unsatisfactory results in the Women’s Health clinic, prompting further investigation.

1. Quantify the % of insufficient pap smears
2. Identify the most common reasons for insufficient pap smears
3. Develop a multi-disciplinary approach to decrease the rates of insufficient pap smears
Methods

• Pap smears collected June 2016-June 2017 were reviewed by the Cytopathology department.
• 1,410 pap smears were reviewed
• Specimens were categorized based on reasons for the insufficient result.

<table>
<thead>
<tr>
<th>Inflammation</th>
<th>Scant cellularity</th>
<th>Obscured by lubricant</th>
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</thead>
<tbody>
<tr>
<td>Obscured by blood</td>
<td>Atrophic pattern</td>
<td>Thick preparation</td>
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• Insufficient specimens providers were stratified by post graduate year (PGY) level.
Reasons for Insufficient Pap Smear Results

- 37% Scant Cellularity
- 32% Combination
- 19% Blood
- 7% Lubricant
- 3% Inflammation
- 1% Atrophy
- 1% Thick Prep

n=104 (7.4%)
Insufficient Paps by Post Graduate Year

- PGY1: 39.4%
- PGY2: 26.0%
- PGY3: 6.7%
- PGY4: 27.9%
Interventions to Date

- **Residents**: 30 minute interdisciplinary training led by HOLOGIC, the makers of ThinPrep™
  - Teaching session started with a 10 question pre-test
  - Emphasis on correct specimen collection

- **Office Staff**: Separate teaching session for nurses and medical assistants with HOLOGIC
  - Video about specimen preparation

- **System**: Discontinuation of polymer containing lubricants to use of Thin Prep approved carbomer-free lubricants for examinations
Post-Intervention Results

3 MONTHS POST INTERVENTION

<table>
<thead>
<tr>
<th>Pre/Post-Test Data (n=22)</th>
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<tr>
<td><strong>Average Scores</strong></td>
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<tr>
<td>• Pre-test Scores: 68.9 %</td>
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<td>• Post-intervention scores: 75.5%</td>
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<td>• Change in post-test score: 6.6%</td>
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Discussion

• Medical Students typically rotate with PGY4 or PGY1

• PGY3 and PGY2 class have limited clinic rotations

• Education vs lubrication

• Patient characteristics and demographics
Conclusions & Future Implications

• Initiation of resident and nursing educational opportunities
  • Education for off-service physicians and medical students

• Regardless of PGY, all resident physicians can benefit from education

• Annual educational initiatives with the Cytopathology department to optimize specimen collection

• Multidisciplinary approach will enhance the quality of care in our Women’s Health clinic.

• Assess insufficiency rate 1 year post intervention


Acknowledgements

- Louisiana State University Health New Orleans
  - Department of OBGYN Faculty Mentor - Stacey L. Holman, MD
  - Resident Collaborators – Eliza Rodrigue, MD & Markeiya Polite, MD, MPH
- University Medical Center - New Orleans
  - Pathology/Cytotechnologist - Elizabeth Bohrer, CT (ASCP)
- Spirit of Charity Foundation
- HOLOGIC