VIRAL PHARYNGITIS: IMPROVED DIAGNOSIS WITH THE CENTOR CRITERIA

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Objectives
- Description of the clinical problem
- Review of Literature
- Explain theoretical framework adapted
- Explain Quality Improvement Model adapted
- Discuss findings and outcomes
- Implications for Nursing Practice

Clinical Reflective Journal
- Most Common complaint
- Diagnosis
- Returned visits
- Overuse of strep tests
- No evidence-based guidelines

Conclusions

Viral Pharyngitis
- Difficult
- Led to issues:
  - Antibiotic overuse
  - Side effects
  - Increased costs
  - Antibiotic resistance

Antibiotic Overuse
- 2 million people affected by antibiotic resistant infections
- Associated with 23,000 US deaths annually
  (CDC, 2013)
- Pharyngitis leading Dx with 40% of unnecessary antibiotic Rx
  (Fiore, Fettic, Wright, & Ferrara, 2018)

Centers for Disease Control and Prevention
World Health Organization

Antibiotic Expenditures
- 2010-2015 US antibiotic expenditures $56 billion
- One solution
  (Suda et al., 2018)
Misdiagnosis

- On-site Rapid Antigen Strep Tests
- Usual way
- Standard treatment plan
- Misled
- Seek additional care
- Healthcare system affected


Providers reluctant

- Patient remarks
- Provider thoughts
- Patient wants
- Provider wants

https://www.pinterest.com/pin/255931191294378190/

Literature Review

- Group A Streptococcal (GAS) from viral pharyngitis
- Sensitivity for identifying GAS infection
  - 83.1% of the time compared to 69.4% usual care
- Validated:
  - Centor, Witherspoon, Dalton, Brody, & Linn, 1981
  - Fine, Nisit, & Mandl; in 2012
  - 15 years or older

- Adds a criteria for age
  - Aged 3-14 add 1 point
  - Aged 45 or older subtract 1 point
- Validated:
  - Michael, White, Tannenbaum, & Baum, 1998
  - Michael, Goel, To, & Low, 2000
  - Fine, Nisit, & Mandl; in 2012
  - 3 years or older

Centor Score

Modified Centor Score

Centor Criteria

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<tr>
<th>Criteria</th>
<th>Score</th>
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<tr>
<td>Temperature above 100.4</td>
<td>1</td>
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<tr>
<td>Absence of cough</td>
<td>1</td>
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<td>(as cough is more likely to be associated with a viral infection)</td>
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<td>Tonsillar or tender anterior cervical lymph nodes</td>
<td>1</td>
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<tr>
<td>Tonsillar swelling or exudates</td>
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(Center Criteria adapted for Presentation by M. Denning-Maldonado, 2018)

Literature Review

- Centor Score

Table 3. Summary of Guidelines For Pharyngitis

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Abbreviations: AAP, American Academy of Pediatrics; AHA, American Heart Association; ACCP, American College of Chest Physicians; AHA, American Heart Association; CDSC, Center for Disease Control and Prevention; EISDM, Expertise Society of Clinical Microbiology and Infectious Diseases; EMB, European Committee of Antibiotic Policy; EMB, European Committee of Antibiotic Policy;


Theoretical Framework

Lewin’s Change Theory

FADE MODEL

Focus
- Clinical Reflective Journal

Conduct/Evaluate
- Capstone Project implemented
- Evaluate data

Analyze
- Literature Review

Develop
- Capstone Project designed

(FADE Model adapted for Presentation by M. Denning-Maldonado, 2018)

- Implement diagnostic tool
- No antibiotic given for Centor Score of 0 or 1
- Symptomatic treatment only
- Quality care measures improved

Goals

Outcomes

- 21 participants included
- 20 symptoms resolved (95%)
- 2 returned for re-evaluation
- 44 participants total
- 23 excluded

Implications for Nursing Practice

- Evidence-based practice guiding decisions
- Translating research into clinical practice
- Empower patients with education

Provider Solutions

- Focus on Symptoms
- Delayed Prescription
- Office materials
- Keep calm and use time wisely
  (Martinez, et al., 2018)

Conclusion

- Transform Care
- Patients wants
- Provider approach
- Best practice
- Quality patient care

Outcome Measures

Evidence-Based Practice Guiding Decisions

Provider Solutions

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Questions?