Reprocessing Lapses: What Are We Missing?

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1. Introduction

Background:
- Endoscopes are readily contaminated with microorganisms during use.
- Guidelines recommend meticulous cleaning and high-level disinfection between uses.
- Reprocessing guidelines vary among institutions.

Hypotheses:
- Existing EAI risk estimates are erroneous.
- Guidelines assert endoscopes are associated with more infections than any other medical instrument.

Research Objectives:
- To expand the range and accuracy of the risk estimates.
- To evaluate the nature and breadth of reprocessing lapses and implications for patient safety.

2. Methods

Case reviews were completed on 466 EAI cases to:
- Identify the cause of the risk estimates.
- Assess the methods used to calculate the risk estimates.
- Perform statistical analyses with the original data to validate the risk estimates.

Conduct a nationwide survey of reprocessing errors reported in North America during 1990-2010; note patient exposure to contaminated scope.


Case sequence.
- Patients admitted or referred for endoscopy.
- Patients received an infectious agent.
- Patients suffered infections.

3. Results

Analyzed the EAI risk estimates by:
- Hypotheses:
  - Introduction 2005-2012 that led to patient exposure to contaminated scopes.
- Reprocessing lapses: What are we missing?

- Expanding search to include government documents and media reports.
- Searching for peer-reviewed journal articles.

- Assessing the methods used to calculate the EAI risk estimates.
- Identifying the sources for the risk estimates.

- To evaluate the nature and breadth of reprocessing lapses and implications for patient safety.
- To assess the origin and accuracy of the EAI risk estimates.

Existing EAI risk estimates are erroneous.

Guidelines assert endoscopes are associated with more infections than any other medical instrument.

- Endoscopes are heavily contaminated with microbes during use.
- Nonadherence with reprocessing guidelines is common.
- Guidelines recommend meticulous cleaning and high-level disinfection between uses.

4. Summary and Conclusions

Dirty endoscopes go unnoticed, exposing patients to infection—often with serious consequences.

- Follow-up on two analyses of sentinel events investigated by government authorities, but not reported in peer-reviewed journal articles.

- Reprocessing lapses continue to occur, are often prolonged, and cause increased risk of infection.
- Due to low EAI risk estimates, patients are either not notified or a false sense of security is conveyed.
- Action is needed to promote proper endoscope reprocessing, verify its effectiveness, and ensure patient safety.

Selected Citations

