Adoption of Surgical Site Infection Prevention Policies in California Hospitals

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BACKGROUND:

- Surgical site infections (SSI) are a significant cause of morbidity and mortality in the United States
  - 290,465 SSI occur annually\(^1\)
  - 8,205 deaths are associated with SSI annually\(^1\)
  - $25,546 hospital costs per SSI\(^2\)
- SSI prevention guidelines\(^3\) and the Surgical Care Improvement Project\(^4\) provide clear recommendations for:
  - preoperative hair removal
  - prophylactic antibiotic selection
  - antibiotic discontinuation
  - glucose control
  - normothermia
- Little is known of the extent to which hospitals have adopted SSI prevention policies

OBJECTIVE:

- To describe the presence of and adherence to SSI prevention policies in California hospitals

METHOD:

- A web-based survey of 331 acute care hospitals in California was conducted in Spring 2010
- The survey was part of a larger study examining the changing role of infection preventionists
- A modified Dillman technique was used for recruitment including an initial invitation letter, follow-up letters, phone calls and a final chance letter
- Descriptive statistics were computed using SPSS-18 (IBM)

RESULTS:

- 180 hospitals provided data on SSI policies (54.4% response rate)
- The majority of respondents had written policies in place for 5 recommended practices
- Policies for appropriate hair removal and selection of antibiotics were reported to be correctly implemented >95% of the time in 74.2% and 56.3% of hospitals respectively
- Policies for discontinuing prophylactic antibiotics within 24 hours of surgery end time, postoperative glucose control, and normothermia in colorectal surgery patients were reported to be correctly implemented >95% of the time in less than half of hospitals (41.8%, 35.6%, and 46.3% respectively)
- 78.9% of hospitals had a system in place to feedback SSI events to surgeons

CONCLUSIONS:

- Most California hospitals surveyed have written policies in place for SSI prevention
- However, with the exception of perioperative hair removal, >95% correct implementation of any single policy is infrequently reported
- Efforts to improve the consistency of implementation of SSI prevention policies are indicated
- Research into the adoption of SSI prevention policies in surgical outpatient settings is needed

Sample Characteristics

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<th>Hospital Number of Beds</th>
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<tr>
<td>&lt; 200</td>
<td>260</td>
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<tr>
<td>201-500</td>
<td>72</td>
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<tr>
<td>501-1000</td>
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<td>&gt;1000</td>
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<table>
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<th>Hospital Setting</th>
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<tbody>
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<tr>
<td>Suburban - Medium Sized Town</td>
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<tr>
<td>Rural - Town &lt;50,000</td>
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<tr>
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REFERENCES: