Methicillin-Resistant Staphylococcus intermedius Pneumonia Following Coronary Artery Bypass Grafting

All tube coagulase-positive staphylococci were identified as *Staphylococcus aureus* until Hajek [1] distinguished *Staphylococcus intermedius* as a separate species. This organism is tube coagulase-positive, but the cell wall does not contain protein A. Clumping factor is present only in 14% of isolates [1]. Commercial latex agglutination tests that detect clumping factor or protein A often misidentify *S. intermedius* isolates as “coagulase-negative staphylococci.” We report a case of *S. intermedius* pneumonia in which sputum cultures reported positive for “staphylococcus not aureus” (SNA) were initially dismissed as containing only nonpathogens. After the patient’s condition failed to improve with standard therapy and the organism was isolated repeatedly in pure cultures, clinical suspicion increased, and the organism was identified to the species level.

A 73-year-old man with a history of type II diabetes mellitus underwent coronary artery bypass grafting. On postoperative day 5, the patient had fever (temperature to 38.8°C) and a large amount of pulmonary secretions that required nasotracheal suctioning four to five times a day. A chest radiograph showed a left lower lobe infiltrate, and ceftriaxone therapy was started.

Fever (temperatures as high as 39.2°C) continued, and on postoperative day 9, therapy was changed to cefazidime and gentamicin. Gram staining of a sputum sample taken on that day revealed moderate polymorphonuclear leukocytes and moderate gram-positive cocci. Culture yielded moderate growth of a *Staphylococcus* strain that was negative for clumping factor and protein A by the Staphaureux test (Murex Biotech Limited, Dartford, UK). Our laboratory reported this strain as SNA. The patient required reintubation on the 11th postoperative day for respiratory failure. Therapy with cefazidime and gentamicin was discontinued, and treatment with piperacillin/tazobactam was started. On the 14th postoperative day, flexible bronchoscopy showed marked bilateral thick mucoid lower lobe secretions causing obstruction. The patient no longer required ventilatory assistance on the 15th postoperative day but continued to require frequent suctioning via the tracheostomy tube to clear copious amounts of purulent secretions.

By the 21st postoperative day, the patient remained febrile, and cultures of seven sputum specimens yielded pure growth of SNA. Further testing of the organism was requested. A tube coagulase test was positive. SNA isolates were identified as *S. intermedius*, and antimicrobial susceptibility testing was performed by using the Vitek System (bioMérieux Vitek, Hazelwood, MO) and standard laboratory testing [2]. The isolates were susceptible to trimethoprim-

---

Reprints or correspondence: Dr. Jennifer S. Daly, Infectious Diseases, UMass Memorial Health Care, 55 Lake Avenue North, Worcester, Massachusetts 01655 (Jennifer.Daly@banyan.ummc.edu).

Clinical Infectious Diseases 1999;29:218–9

© 1999 by the Infectious Diseases Society of America. All rights reserved.

1058–4838/99–0044$03.00

References


Kimberly Gerstadt, Jennifer S. Daly, Michael Mitchell, Mireya Wessolosky, and Sarah H. Cheeseman

Departments of Medicine and Pathology, UMass Memorial Health Care and University of Massachusetts Medical School, Worcester, Massachusetts


8. Studahl M, Bergström T, Hagberg L. Acute viral encephalitis in adults—


**Case of Pleuropericardial Disease Caused by \textit{Actinomyces odontolyticus} That Resulted in Cardiac Tamponade**

To our knowledge, pleuropericardial infection due to \textit{Actinomyces odontolyticus} has not previously been reported. We describe a patient with this infection who did not have the usual risk factors for actinomycosis. We hypothesize that infection developed following previous gastric surgery. The patient was successfully treated with ceftriaxone.

A previously healthy 68-year-old man was admitted to the hospital with fever, chills, fatigue, and dyspnea. Six months before admission, the patient had undergone endoscopic biopsy followed by laparotomy and surgical resection of a noninvasive adenocarcinomatous gastric polyp. A postoperative chest radiograph showed cardiac silhouette enlargement and a new left pleural effusion that were not investigated further. Two weeks postoperatively, he developed a dry cough, chills, and dyspnea. He was

Reprints or correspondence: Dr. Kenneth A. Litwin, Department of Internal Medicine, Yale University School of Medicine, 87 LMP, P.O. Box 208033, New Haven, Connecticut 06520-8033 (klitwin@sprynet.com).

**Clinical Infectious Diseases** 1999;29:219–20

© 1999 by the Infectious Diseases Society of America. All rights reserved.

1058–4839/99/2901–0045$03.00

Clinical Infectious Diseases 1999;29:219–20

© 1999 by the Infectious Diseases Society of America. All rights reserved.

1058–4839/99/2901–0045$03.00

**Table 1. Summary of data on reported cases of intrathoracic \textit{Actinomyces odontolyticus} infection.**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Disease(s)</th>
<th>Age (y)/sex</th>
<th>Underlying condition(s)</th>
<th>Presentation</th>
<th>Chest roentgenogram finding(s)</th>
<th>Diagnostic procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>[2]</td>
<td>Lung abscess</td>
<td>61/F</td>
<td>Rheumatoid arthritis, corticosteroid therapy</td>
<td>Fever, chest pain, dyspnea</td>
<td>Pleural effusion, cavitary lesion</td>
<td>Abscess culture</td>
</tr>
<tr>
<td>[3]</td>
<td>Pneumonia</td>
<td>61/M</td>
<td>Lung transplant, immunosuppression</td>
<td>Chest pain</td>
<td>LUL infiltrate</td>
<td>Culture of bronchoscopy brush specimen</td>
</tr>
<tr>
<td>[4]</td>
<td>Chest wall erosion, spinal and calf abscesses, pleural lesion</td>
<td>58/F</td>
<td>Dental plate</td>
<td>Weight loss, fever, chest pain</td>
<td>Left anterior midlung shadow</td>
<td>Culture of chest wall biopsy specimen</td>
</tr>
<tr>
<td>[5]</td>
<td>Empyema</td>
<td>38/F</td>
<td>Periodontal disease</td>
<td>Weight loss, fever, chest pain, cough, dyspnea</td>
<td>Pleural effusion</td>
<td>Pleural fluid culture</td>
</tr>
<tr>
<td>[6]</td>
<td>Pneumonia</td>
<td>52/F</td>
<td>Bronchiectasis</td>
<td>Weight loss, fever</td>
<td>LUL infiltrate with cavitation</td>
<td>Sputum culture, lung granule</td>
</tr>
<tr>
<td>[7]</td>
<td>Pneumonia, skin abscess</td>
<td>52/M</td>
<td>Alcoholism, periodontal disease</td>
<td>Weight loss, fever, cutaneous drainage</td>
<td>Bilateral cavitary apical infiltrates, pleural thickening</td>
<td>Abscess culture</td>
</tr>
<tr>
<td>[8]</td>
<td>Pneumonia, empyema</td>
<td>40/M</td>
<td>Alcoholism, smoker</td>
<td>Fever, chest pain, productive cough</td>
<td>RUL infiltrate, pleural effusion</td>
<td>Pleural fluid culture</td>
</tr>
<tr>
<td>[9]</td>
<td>Empyema necessitatis</td>
<td>50/M</td>
<td>S/P pneumonectomy for aspergilloma, alcohol use, pulmonary TB</td>
<td>Fever, chest pain, dyspnea</td>
<td>Left pleural empyema</td>
<td>Pleural fluid culture</td>
</tr>
<tr>
<td>[PR]</td>
<td>Pericardial and pleural effusions</td>
<td>68/M</td>
<td>S/P resection of gastric polyp</td>
<td>Dyspnea on exertion, fever</td>
<td>Pericardial and pleural effusions</td>
<td>Pericardial fluid culture</td>
</tr>
</tbody>
</table>

**NOTE.** LUL = left upper lobe; PR = present report; RUL = right upper lobe; S/P = status post; TB = tuberculosis.