Antimicrobial Susceptibility Patterns of Unusual Nonfermentative Gram-negative Bacilli Isolated from Latin America: Report from the SENTRY Antimicrobial Surveillance Program (1997-2002)

AC GALES, RN JONES, SS ANDRADE, HS SADER
Universidade Federal de São Paulo, São Paulo, Brazil; The Jones Group/JMI Laboratories, North Liberty, IA

INTRODUCTION

Unidentified due to conventional Gram-negative bacilli (SNFB) or other fasting unknowns or unclassified lab studies. These are considered unusual nonfermentative Gram-negative bacilli (NF-GNB) and are part of the urban respiratory and urinary tract infections. They include, but are not limited to, Burkholderia cepacia, Pseudomonas aeruginosa, Achromobacter spp., and Acinetobacter spp. These organisms are associated with a variety of clinical manifestations, including pneumonia, lower respiratory tract infections, and urinary tract infections. Recent studies have shown that these organisms may be more common than previously thought.

MATERIALS AND METHODS

We analyzed a total of 176 unique NF-GNB isolates from Latin American medical centers. The study included 32 medical centers listed according to the bacterial genera and year of isolation (SENTRY Program, 1997-2002). The isolates were collected from 15 Latin American countries, including Brazil, Chile, Colombia, Mexico, and Argentina, among others.

RESULTS

We identified 9 different genera and 21 different species of NF-GNB isolates from Latin American medical centers. The most frequently isolated species were Burkholderia cepacia (47.2%), Pseudomonas aeruginosa (18.1%), and Achromobacter spp. (18.1%).

CONCLUSIONS

Nonfermentative Gram-negative bacilli other than P. aeruginosa and Acinetobacter spp. are uncommon pathogens; however, they represent a real challenge for the routine clinical microbiology laboratories since species identification is complex and antimicrobial susceptibility profiles are unpredictable. In this context, surveillance programs such as the SENTRY Program, are very helpful by providing the most common susceptibility patterns of these infrequent pathogens and guide the best empiric antimicrobial treatment of these infections.