resistance to CL was not useful to predict REA type, as these 10 strains were of 4 different REA types.

In our study, the discriminatory index of the antibiogram was 0.78 for MRSA, a much lower value than the index of 0.98 reported by Struelens et al.[8] In part, this is because of a difference in the criteria used for typing. In their study, isolates showing only one major difference (R-S or S-R) or one minor difference (R-I, I-R, S-I, I-S) in susceptibility to one or more agents were considered as distinct strains. In contrast, with the criteria proposed by Tenover,[4] the isolates showing dissimilar resistance patterns to at least two or more agents were considered as different. We used an empirical hybrid method using the predominant pattern and key markers, as described in "Methods."

The genotyping discriminatory index of 0.56 for MRSA in our study is also lower than that found in Struelens' report (0.96).[8] This is probably because our isolates were obtained from an endemic SNF setting where most strains likely represented relatively few clones,[16,17] not from widely separated hospitals, and may also be due to different geographical locations and settings.

In conclusion, our study demonstrated that, in MRSA isolates colonizing patients from one community SNF, genotyping by FIGE REA identified two prevalent REA types, but with some variability of antibiogram patterns within each REA type; and that practical typing by antibiogram phenotype patterns also identified prevalent patterns, but there was some variability in REA types found within many of these antibiogram patterns. Because of the predominance of two REA types in this SNF, the discriminatory ability of genotypes as determined by FIGE REA and of antibiogram typing, as calculated by the Discriminatory Index, was less than reported for MRSA isolated from different acute-care hospitals.[8]

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Epidemic of Pneumonia Associated With Mechanical Ventilation

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Dr. Mussaret Zaidi and colleagues from the Departamento de Investigacion, Hospital General O'Horan, Merida, Yucatan, Mexico, conducted a study to determine the main epidemiological, clinical, and microbiological characteristics of an outbreak of ventilator-associated pneumonia at an ICU in Yucatan. An 11-month prospective and observational study was designed to determine incidence, mortality, potential reservoirs, etiologic agents, and antibiotic susceptibility patterns.

The incidence of ventilator-associated pneumonia was 74%. The crude mortality rate was 88% compared to a 19.5% expected mortality rate. Gram-negative bacteria were isolated from 98% of the cultures, of which 46% were susceptible to third-generation cephalosporins, 59% to fourth-generation cephalosporins, 70% to ciprofloxacin, and 100% to imipenem. *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* were isolated from some of the ventilator circuits and the sink.

It was concluded that the high incidence of pneumonia and associated mortality in our ICU may be attributed to the absence of infection control measures and the high prevalence of multiresistant organisms, which is related to antibiotic abuse.

FROM: Zaidi M, Martin G, Rosado R. Epidemic of pneumonia associated with mechanical ventilation in Merida, Yucatan. *Salud Publica Mex* 1999;41(suppl 1):S38-S43.