Abstract

Salmonella enterica serovar Heidelberg ranks among the most prevalent causes of human salmonellosis in the United States and Canada, although it has been infrequently reported in South American and European countries. Most Salmonella infections are self-limiting; however, some invasive infections require antimicrobial therapy. In this work we characterized an oxyimino-cephalosporin resistant S. Heidelberg isolate recovered from an inpatient in a Buenos Aires hospital. CMY-2 was responsible for the -lactam resistance profile. S. Heidelberg contained a 97 kb plasmid belonging to the Inc N group harboring blaCMY-2. ISEcp1 was located upstream blaCMY-2 driving its expression and mobilization. The isolate belonged to sequence type 15 and virotyping revealed the presence of sopE gene. In this study we identified the first CMY-2 producing isolate of S. Heidelberg in Argentina and even in South America.

Keywords

Salmonella Heidelberg, CMY-2 -lactamase, ST15.