



Molecular Characterization of Methicillin-Resistant *Staphylococcus aureus* Isolates from Pediatric Patients in Cartagena de Indias, Colombia



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Background: *Staphylococcus aureus* (SA) is a major cause of skin and soft tissue infections such as furuncles and abscess and less frequently it causes bone and joint infections (1, 2). Published reports of SA infections in the north coast of Colombia are limited. Here, we describe for the first time the molecular features of SA isolated from infections in children attending the main children's hospital in Cartagena-Colombia (Hospital Infantil Napoleón Franco Pareja, HINFP).

Methods:

Strains Collection

Multiplex PCRs

PFGE typing

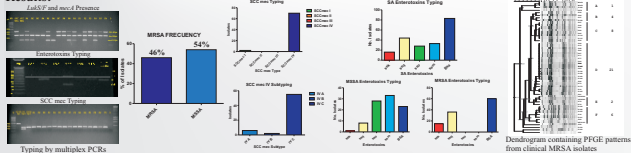


163 Clinical *S. aureus*
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1. Nuc, MecA, PVL
2. sek, seq, seo, sem, Bsa
3. SCC mec Typing

SmaI digestion

Results:



Conclusions: a significant proportion of SA pediatric infections in Cartagena are caused by CA-MRSA. However, MSSA remains an important pathogen responsible for community associated pediatric infections. The burden of community associated infections caused by this pathogen is increasing worldwide warning the healthcare systems about the emergence and dissemination of these infections.

References:

1. Lowy, F.D., *Staphylococcus aureus* infections. N Engl J Med, 1998, 339(8): p. 520-32.
2. Gillet, Y., et al., Association between *Staphylococcus aureus* strains carrying gene for Panton-Valentine leukocidin and highly lethal necrotising pneumonia in young immunocompetent patients. Lancet, 2002, 359(9308): p. 753-9.