CA-MRSA AS A CAUSE OF LEMIERRE’S SYNDROME: FIRST REPORT OF TWO CASES IN ARGENTINA

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Background: Lemierre’s syndrome (LS) is currently an uncommon disease and *Fusobacterium necrophorum* is responsible for two-thirds of the cases. From 1965 to the present, a total of 11 cases were reported in the literature caused by *Staphylococcus aureus*, one of them was recently associated to USA300 clone. Here we report two LS cases in Argentina associated with CA-MRSA.

Case reports: Case 1: a 17-year-old man, without any clinically relevant data, was hospitalized in September 2011 due to right internal jugular vein and right cavernous sinus thrombosis, brain abscess and septic pulmonary emboli. MRSA was isolated in 3/4 blood cultures. Antibiotic treatment and anticoagulation were administered with complete clinical resolution.

Case 2: a 34-year-old man, without any clinically relevant data, was hospitalized in November 2011 with bilateral internal jugular vein, transverse sinus thrombosis, and septic pulmonary emboli. MRSA was isolated in 2/2 blood cultures and BAL. The patient died after multiple complications in spite of antibiotic treatment and anticoagulation.

Strains were not epidemiologically related. The type of staphylococcal chromosomal cassette (SCCmec) and PVL were determined by PCR as previously described. Genetic relationship among isolates and reference strains was established by SmaI-PFGE. Both strains were characterized as CA-MRSA, carried SCCmecIV, were PVL(+) and were not genetically related by PFGE. One of the CA-MRSA (case 2) was genetically indistinguishable by PFGE from CA-MRSA ST5-SCCmecIV-PVL+, the dominant CA-MRSA clone detected in Argentina since 2000. None of these strains was related to the USA300 clone (ST8) or the Southwest Pacific (ST30) clone. To the best of our knowledge, these represent the firsts two cases of LS associated with CA-MRSA reported in Argentina.

Comments: CA-MRSA could be an emerging cause of LS in addition to typically recognized organisms. Awareness of CA-MRSA will guide empirical antibiotic choice and may positively impact patient outcomes.