

Infectious caused by community-acquired Methicillin-Resistant *Staphylococcus aureus* (CA-MRSA): three-years experience of an university hospital in Rome

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Infezioni causate da *Staphylococcus aureus* meticillino-resistenti acquisiti in comunità: esperienza triennale di un policlinico universitario romano

SUMMARY

To date methicillin-resistant *Staphylococcus aureus* (MRSA) is one of the most common pathogens causing nosocomial infections(1).

In Europe the proportion of MRSA is increasing sharply and the distribution varies from country to country. In recent years there has, in various parts of the world, the emergence of infection with strains of *S. aureus* methicillin-resistant community-acquired (CA-MRSA) than those circulating in hospitals(2). These strains contain a gene that confers resistance to methicillin (mec A SSC mec IV) which is usually associated with the gene for Leukocidin Pantone Valentine (PVL) toxin responsible for necrosis of skin and soft tissue (3).

In 2006-2008, at the Laboratory of Bacteriology Polyclinic Tor Vergata, were isolated a total of 738 strains of *S. aureus* from biological samples of different nature (oral, vaginal secretions, wound swab, secreted headset, etc ...) of patients related to our surgeries. The identification and study of drug sensitivity of strains were performed with the automatic VITEK2 (bioMérieux).

Of the 738 strains of *S. aureus* identified 212 (28.7%) were resistant to methicillin (MRSA), with an increasing trend over the years: 46 isolates, respectively, in 2006, 76 in 2007 and 90 in 2008. The highest frequency of MRSA (varying between 85% and 95%) was detected in wound swabs from the dispensary and diabetes (diabetic foot).

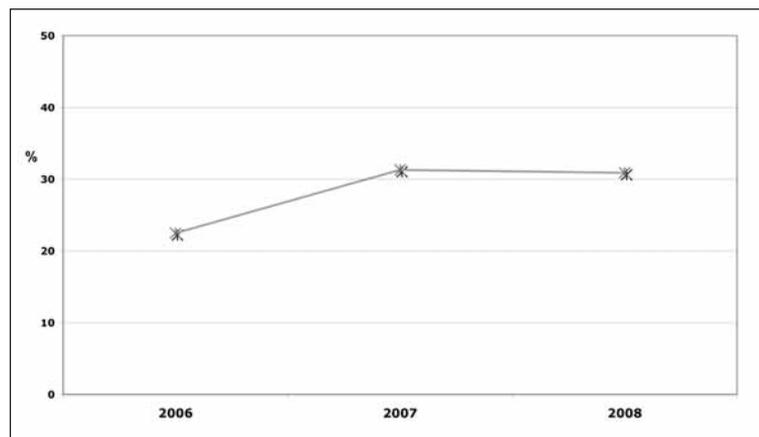


Figura I. CA-MRSA trend in 2006 - 2008.

The excessive and inappropriate use of antibiotics in recent years has certainly contributed to a greater spread of MRSA in hospitals so that patient. The case studies found in our center last three years confirms the interest that must be paid to the phenomenon of CA-MRSA infections in the territory.

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