Staphylococcus aureus STRAINS ISOLATED FROM BOVINE MASTITIS SENSITIVITY TO ANTIBIOTICS

Bouzidi Said¹, Ghazi Kheira¹, Meliani Samia²*, Boulbair Ismail¹, Chaouch Rouba¹

¹The Veterinary Sciences Institut, University of Tiaret, 14000, Algeria;
²Nature and life sciences faculty, University of Tiaret, 14000, Algeria;

*Corresponding Author Meliani Samia, e-mail: meianisamia@hotmail.com;

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ABSTRACT

The aims of this work was to study the sensitivity of Staphylococcus aureus strains isolated from bovine mastitis antibiotics. A total of 22 pure strains of S. aureus were collected from 58 quarter milk samples from 29 (69,04%) dairy cows detected with subclinical mastitis by California mastitis test (CMT). The isolates were subjected to an antibiogram. The tests showed that one strain among the isolates tested is MRSA (Methicillin resistant Staphylococcus aureus). This MRSA exhibited cross-resistance to all beta lactamines which extends to other families of antibiotics. SASM strains also showed strong resistance vis-à-vis penicillin (95,23%) and tetracycline’s (90,47%). Resistance was also recorded vis-à-vis; the combination amoxicillin + clavulanic acid (47,61%), erythromycin (19,04%), the combination trimethoprim + sulfamethoxazole (4,76%) and bacitracin (9,52%), neomycin, gentamicin, ciprofloxacin and clindamycin were active on MRSA’s. The high prevalence of subclinical mastitis and multi-resistant S. aureus strains testifies to the need for an effective control strategy based essentially on the early detection of subclinical mastitis, the identification of the causative agent and the study of its sensitivity to common antibiotics.

Keywords: Mastitis, SARM, Antibiogram, SASM, S. aureus.