SUMMARY

Methicillin Resistance and Slime Positivity of Staphylococci Isolated from Bovine Mastitis

The aims of this study were to determine the aerobic bacterial agents cause bovine mastitis, to investigate the slime formation and meticilline resistance in isolated staphylococcus species. Material of this study was consisted of 339 mastitis suspected milk samples taken from 152 dairy cattle rearing in Umurlu county of Aydın Province. Identifications of isolated microorganisms on genus basis were performed with standart biochemical methods while sequence analysis was used for species basis identification of coagulase negative (CNS) and coagulase positive (CPS) staphylococcus strains. Methicilline resistance of stapylococcus strains were performed with disk diffusion method by using cefoxitin disk and slime formation was detected with Congo Red Agar method. Chi-Square Test was used for analysing the effect of slime formation on methicilline resistence between CNS and CPS stapyhlococcus strains. CNS (23 *S. chromogenes*, 17 *S. haemolyticus*, 10 *S. pseudointermedius*, 9 *S. simulans*, 8 *S. epidermidis,* 6 *S. pasteuri*, 3 *S. sciuri*, 2 *S. vitulis*, 2 *S. equorum*, 2 *S. xylosus,* , and 1 *S. warneri*) were the most common cause (24.5%) of mastitis in cows while CPS (*S. aureus*) were the most second (20.9%). 16 (10.4%) staphylococcus strains were found as methicilline resistance while 55 (35.7%) were slime positive from 154 stapylococcus strains. It was determined that slime formation has no effect on methicilline resistance in CNS and CPS staphylococcus strains. It was thought that methicilline resistance is beginning a problem and methicilline resistance may be the most important factor in the treatment of staphylococcal mastitis in the near future in Aydın.

Key words: Mastitis, Methicillin Resistance, Slime, *Staphylococcus* spp.