Prevalence and Resistance of Staphylococcus Aureus Isolated from Milk by Using PCR Method in Rafsanjan, Iran

Reza Shahrokhabadi, 1 Ebrahim Rahimi, 2 Rahele Poursahebi 3

1. Young Researchers Club, Veterinary Medicine, Shahr-e-Kord Branch, Islamic Azad University, Shahr-e-Kord, Iran
2. Department of Food Hygiene, School of Veterinary Medicine, Shahr-e-Kord Branch, Islamic Azad University, Shahr-e-Kord, Iran
3. Veterinarian, Bahonar University, Kerman, Iran

The zoonotic diseases are important factors in hygiene and health of each society. *Staphylococcus aureus* is considered as the third factor in levels of prominence of nutritional diseases.

The purpose of this descriptive-sectional study was to evaluate the prevalence and microbial resistance of this pathogenic factor in Rafsanjan.

To achieve this purpose, we randomly collected 240 cases from organizations of milk gathering. In Rafsanjan from April 2011 to March 2012 and they were transferred into the laboratory beside ice pieces with standard instructions. The volume of sampling 240 cases was determined by \( n = Z^2 \times P \times (1-P)/d^2 \) then

The results showed that 73 cases (30.41%) were positive after chemical tests and 62 cases were positive in molecular examination. This study also demonstrates that all of the positive cases via molecular method were resistant to penicillin, ampicillin, amoxicillin, gentamicin, 50 cases (68.49%) were sensitive to cephalexin, nalidixic acid, 48 cases (77.41%) were sensitive to cotrimoxazole and 59 cases (95.16%) were sensitive to ceftriaxone. The level of microbial infection of this product is so high which demonstrates infringement in the process of this product. So, we should reconsider the usage of this material for producing the products used by public.

Corresponding author: reza.vet64@gmail.com

© 2013 Zahedan University of Medical Sciences. All rights reserved.

References