IDENTIFICATION OF COAGULASE-NEGATIVE STAPHYLOCOCCI ISOLATED FROM MAMMARY GLANDS OF HEIFERS TREATED PRE-CALVING

(IDENTIFICAÇÃO DE STAPHYLOCOCCUS COAGULASE NEGATIVO ISOLADOS DE GLÂNDULAS MAMÁRIAS DE NOVILHAS TRATADAS NO PRÉ-PARTO)

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Mastitis, the inflammation of the mammary gland, is responsible for major producer losses. Heifers can become susceptible to mastitis pathogens at around 6-8 months old. The coagulasenegative staphylococci (CNS) are frequent agents in contagious mastitis. Some researchers classify the CNS as opportunistic skin and teats microbiota. The aim of this study was to identify the CNS species present in the mammary gland of heifers treated before delivery. We used 40 Holstein heifers from a farm located in Descalvado - SP, the animals were treated 60 days pre-calving with Cefalonium anhydrous 0.25g, with subsequent application of internal sealant in the teats containing mainly bismuth subnitrate. The 160 samples of mammary gland secretion were collected before applying the medication, the 160 colostrum samples were collected immediately after delivery, and the 1600 milk samples were collected monthly throughout the lactation period; all samples were collected aseptically. The experiment lasted from November, 2010 to September, 2011. Microbiological analyses to identify the CNS species were performed using fermentation tests for sugars. From the samples collected before delivery 40 (25.0%) had CNS. The results showed predominance of the following species S. simulans 19 (47.5%), S. hominis 8 (20%), S. haemolyticus and S. epidermidis 6 (15%, each/respectively) and S. saprophyticus 1 (2.5%). From the samples taken at delivery and postpartum 66 (3.8%) had CNS while the following species were identified: S. simulans 35 (53%), S. saprophyticus 12 (18.2 %), S. epidermidis and S. capitis 5 (7.6%, each), S. haemolyticus and S. xylosus 3 (4.5%, each), S. hominis 2 (3.1%) and S. cohnii 1 (1.5%). Based on the results, it is concluded that there is a wide variety of species of CNS present in the mammary gland of heifers, which shows the importance of these animals as possible contamination sources in the flock.

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