MANAGEMENT INFLUENCE ON MASTITIS IN DAIRY COWS

INFLUENȚA MANAGEMENTULUI ASUPRA INCIDENTEI MAMITELOR LA VACILE DE LAPTE

ȚIBRU, I. CHIRILĂ, D.

Veterinary Medicine Faculty, Timisoara, România

An analyze of the teats of cows from four farms with milking parlor was carried out to see the environment impact on mastitis. The major causes of the mastitis were the low preoccupation for the maintenance of the normal function of the milking machine, the lack to keep the waiting time in a standing position, after the milking, the lack of instruction of the milking personnel.

Key words: mastitis, management, dairy cows

Introduction

In the continuous fight to obtain competitive milk there is a lot of factors that have to be quantified. The consumer wants milk that should not represent a danger for him, the processor wants to obtain a product with viability as long as it can, and the producer wants milk so he can get enough money to cover his costs and that he can have a quiet future.

All the milk processing plants have their own hygienic program of the mammary gland and the milking unit, because they try to stimulate the attainment of quality milk in conformity with H.G. 954/2005, on the strength which can be made the payment of the milk as a charge stock.

This products avalanche and the obsession of hygienic milk have brought up a wrong focusing over the problems settlement. The mammary gland has a very good protection system through the epithelium cells of the teats and through the keratin formed inside of the teat canal. In the mechanical milking if the vacuum compression is not respected, the milk penetration can be forced against the current, from the hose into the teat, the so called impact phenomena of the milk against the teat. This milk certainly contains germs (from the anterior milking), and if the germs are pathogenic they can contaminate the mammary gland.

The teat cup is the only part of the milking unit which comes in contact with the cow, and its way of work has a step that absorbs the milk and a step which massage the teat. Starting from this we monitored which is the management factor that has an influence on the cow mastitis.
Materials and Methods

Four farms were taken in study, where cows were kept in free housing and milked in a milking parlor. The farm A with 65 cows in lactation maintained in free stalls without bedding; farm B with 83 cows in lactation maintained in free stalls with straw bedding; farm C with 400 cows and farm D with 570 cows with straw bedding in deep litter.

In each farm the teats of each cow were examined before and after milking during the milking time. A certain pattern was followed (right front, right back, left back and left front) to inspect each teat in order to establish the presence of some modifications. The functioning of each milking unit was verified, starting from the teat unit thru the pulsation producing unit.

Results and Discussions

In farm A, 248 teats were examined, out of which 100 presented modifications, 82 of them after milking. On the first place of causes, the hyperkeratosis of different grades was situated with 63 teats and 23 teats with hyperemia.

At the technical examination of the milking units we have observed:
- hose kept in use over the best period of usage
- the lack of a periodically revision of the milking unit
- the four module was abnormal adjusted. This is producing the hyperemia and the cyanosis of the teats.

In farm B 332 teats were examined and it was discovered the following: hyperkeratosis of 28 teats, 23 wounds, and 19 papillomatosis. The status of the milking units was good, but the way of use was abnormal, by the fact that the anchorage stands between two milkings was favoring the contamination. The lack of the selection and the deficit bedding constitute premises for a big bacterial deposit.

The analyzed teats (1600) from the farm C had underlined a normal preoccupation of the mastitis prevention, because it was registered only 7 quarters with mastitis. Regarding the milking, the big labor turnover had determined variations of the collector milk quality.

The data obtained after the analyses of the cow teats from the farm D were very good, because there is a preoccupation for the achievement of hygienic milk and for a competitive management. Every quarter is examined bimonthly, establishing the milk conductibility, the protein, the fat and the lactose, and the observations are daily written in the cow’s tables with a specific program into a computer.
Conclusions

1. understanding the way and the implication of the owner in the technological flow has a direct effect on the mammary gland health
2. the existing or not of the normal resting conditions of the cows is directly reflected in the milk synthesis
3. the periodically evaluations of the milking units and the assurance of a 40 -50 kPa vacuum is incumbent for the mastitis prevention
4. the therapeutically conduit has to be the last variant.

Bibliography