

“MASTITIS CONTROL: THE USE OF A VACCINE”

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OBJECTIVE

The objective of study was to evaluate the effectiveness of two different vaccination protocols against bovine mastitis during lactation (STARTVAC[®], HIPRA).

MATERIALS AND METHODS

- The study was carried out in three commercial farms affected by *Staphylococcus aureus* as most frequently isolated microorganism.

- Two different vaccination protocols were used:

Protocol No 1: 1st and 2nd dose were applied 60 and 30 days before calving, respectively. 3rd doses was applied at day 45 after calving. In total 115 animals were used in this protocol.

Protocol No 2: Three doses during lactation were applied: 1st and 2nd dose in 3 weeks interval, 3rd dose 90 days after the 1st dose. In total animals 175 were used according to this blanket protocol.

- The animals were randomly divided into two groups: control group and vaccinated group.



RESULTS

- Four month after calving 83% of animals vaccinated according to protocol No. 1 were healthy. In control group 67% animals were healthy.

- 70 % of the cows vaccinated according to protocol No. 2 remained healthy and only 55 % in the control group.

The statistical analysis using the Fisher exact test has shown significant differences in animals vaccinated according to protocol No. 2. However there were no significant differences in animals vaccinated according to Protocol No. 1.

CONCLUSION

Comparative study evaluating effectiveness of two different vaccination protocols against bovine mastitis has shown that use of three doses (blanket vaccination) is effective to prevent mastitis during lactation in farms infected mainly by *Staphylococcus aureus*. It's worth to mention that similar results were observed in studies performed by other authors. These findings might help to choose appropriate vaccination regime in farms affected by contagious mastitis caused by *Staphylococcus aureus*.

