

LONG-TIME PERSISTENCE OF *Staphylococcus aureus* IN A HERD WITH MASTITIS PROBLEMS

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Introduction

The most commonly isolated bacteria in bovine mastitis in Sweden is *Staphylococcus aureus*. In a study performed in 2006-07 we showed that there usually is one strain of *S. aureus* predominating in milk at each farm. In 2010 we went back to one of the farms to repeat the milk sampling.

Aim

The aims were to investigate if the same strain of *S. aureus* was still present in the herd and to study if *S. aureus* could be isolated repeatedly from individual cows and thus more likely correlate to intramammary infection.

Material and methods

Quarter milk samples from 50 lactating cows, collected at three occasions within a period of 6 weeks in spring 2010, were bacteriologically examined. Officially registered udder disease scores, 0-9, based on somatic cell count were noted. A low score indicates no or low-grade inflammation.

Results

S. aureus was isolated on one occasion or more from 31 cows. More than one third of the *S. aureus* positive cows had an udder disease score 0-2. In six cows *S. aureus* was isolated twice, three of these cows had an udder disease score 0-2. Six isolates from cows with repeated isolation of *S. aureus* were characterized by PFGE and were all shown to be of the same pulsotype as isolated in the herd in December 2006.

Discussion

Can cows with low somatic cell counts act as reservoirs of *S. aureus*? This has to be further investigated.

Conclusions

- The same strain of *S. aureus* still exists in this herd, continuously having problems with *S. aureus* mastitis.
- *S. aureus* can be isolated from cows with a low somatic cell count, sometimes repeatedly.