Results

Of the 28 animals enrolled in the trial, 11 tested positive at the time of first vaccination. The number of animals with positive titers after second vaccination was significantly higher in the vaccinated than in the control group (p=0.0008). Also, the difference between pre- and postvaccination titers was significantly larger (p=0.0002) in the vaccinated animals than in the control group.

Conclusions

The *Neospora caninum* vaccine used in this study proved its efficacy to significantly raise serum antibody titers against *N. caninum*. However, to this day there is no conclusive evidence that a high antibody titer prevents vertical transmission of the organism.

Use of Daily Postpartum Temperatures to select Dairy Cows for Treatment with Systemic Antibiotics

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Introduction

Prevention, and early detection and treatment, of postpartum disease are of economic benefit because of the potential to restore the cow to productivity sooner. Recording rectal temperatures has been widely adapted in protocols to monitor postpartum dairy cows because it is inexpensive and easy to implement. The objective of the following study was to obtain descriptive statistics on daily postpartum temperatures on 1,042 dairy cows.

Materials and Methods

Daily temperatures and postpartum disease events were recorded for 10 days postpartum on 1,042 cows from May 1998 to February 2000, on one farm in southeastern Pennsylvania. Multiparous cows with temperatures greater than 103.5°F (39.7°C) and primiparous cows with temperatures greater than 103.0°F (39.4°C) for two consecutive days were treated with Naxcel® (Pharmacia and Upjohn Animal Health) for five days unless they were determined to be sick, in which case they were treated on Day 1. Cows were classified as normal (NOR) if they did not have a recorded disease in the first 10 days postpartum and did not receive systemic antibiotics. Cows were classified as abnormal (ABNOR) if they had either a retained placenta, dystocia, metritis or mastitis event recorded during the first 10 days postpartum.

Results and Conclusions

NOR cows' average daily temperatures were consistently below 102°F (39°C) for the first 10 days postpartum. ABNOR cows' average daily temperatures were above 102°F for Days 2 through 8 postpartum. Cows requiring systemic antibiotic therapy had their highest temperatures on Days 3 through 6 postpartum. Of cows receiving systemic antibiotic therapy 59% were classified as ABNOR. Cows with temperatures greater than 103°F for two consecutive days or—according to the farm protocol, sick cows treated on Day 1—responded to systemic antibiotic therapy by a significant decrease in temperature one day after treatment. There were no differences in daily postpartum temperatures of NOR cows by lactation number.