multiparous cows, rectal temperatures (during days 3 to 13 post-partum and for five days prior to diagnosis of metritis) were higher in cows that developed metritis regardless of calving status. Rectal temperature measurements delineated three categories of cows: 1) without metritis and no change in RT (mean = 101.5° F [38.2° C]; n = 356); 2) metritis, cows that had an elevated RT (mean = 102.0° F [38.8° C]; n = 55) without an increase in RT during the last 48 hours prior to diagnosis; and 3) septic metritis, cows that had an elevated RT (mean = 102.2° F [38.6° C]; n = 38) with an increased RT during the last 48 hours to a mean of 103.6° F (39.3° C) at diagnosis. All cows experiencing metritis and septic metritis were treated therapeutically as described above. There were no detected differences in accumulated pregnancy rate by 150 days post-partum (mean = 50%) among normal cows and cows experiencing metritis and treated for the condition. As expected, a season effect was detected (cool season [40 %] > than warm season [28 %; $P < 0.02$]).

Significance

Occurrence of metritis was higher in cows experiencing an abnormal calving. Primiparous cows had a greater incidence of metritis in the cool season for both normal and abnormal calvings. In contrast, multiparous cows showed no seasonality in the occurrence of metritis. Evaluation of daily RT distinguished septic from non-septic metritis prior to diagnosis; sequential increases in RT on two consecutive days prior to the actual diagnosis can serve as a predictor of septic metritis and warrants an earlier treatment. Likewise, cows experiencing metritis had a mean increase in basal RT of 0.5° F (0.28° C). Early therapeutic treatment of all cows diagnosed with metritis or septic metritis resulted in pregnancy rates comparable to normal or abnormal calving status cows, not experiencing metritis.

Pregnancy Diagnosis in Dairy Cows by Palpation or Ultrasound: a Survey of US Veterinarians

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Introduction

Our objective was to study palpation and ultrasound pregnancy-diagnostic practices used for dairy cows by US veterinarians.

Materials and Methods

A questionnaire was mailed to 1171 AABP members in the fall 2003 followed by a reminder postcard two weeks later.

Results

Five hundred eighty-eight (50%) veterinarians responded. The following results are based on answers from 522 individuals who were currently in dairy practice and regularly checked dairy cows for pregnancy.

Four hundred one (77%) veterinarians diagnosed pregnancy in dairy cows by rectal palpation only, while 116 (22%) also used ultrasound. Five (1%) used only ultrasound for pregnancy diagnosis.

Median lower cut-off for days since breeding used to check cows was 34 days for palpation and 27 days for ultrasound. When asked the earliest gestation length they were confident diagnosing cows as pregnant, the median response was 32 days for palpation and 27 days for ultrasound. Median for earliest days since breeding they were comfortable administering prostaglandin to cows diagnosed open (non-pregnant) was 35 days for palpation and 28 days for ultrasound.

Not including call fees, median charge per cow was $3 (USD) for palpation and $4.75 for ultrasound. For veterinarians charging by the hour, median cost per cow was estimated based on number of cows checked per hour and ranged from $1.50 to $3 for palpation and $2.40 to $4.50 for ultrasound.

Significance

The study provides an overview of pregnancy diagnostic procedures for US dairy cows and can be used as the basis for future economic studies.