Comparison of Rectal and Vaginal Body Temperatures in Lactating Dairy Cows

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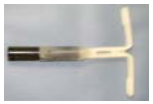
Abstract #33366

Background & Objectives

- Body temperature varies in healthy dairy cattle; it is unknown whether sick cows have a different diurnal temperature pattern.
- Data loggers can be used to monitor vaginal temperatures; it is not known how well these measures relate to rectal temperatures more typically used to assess
- The objectives of this study were to determine the correlation between vaginal and rectal temperatures, and describe the diurnal rhythms in body temperature for sick

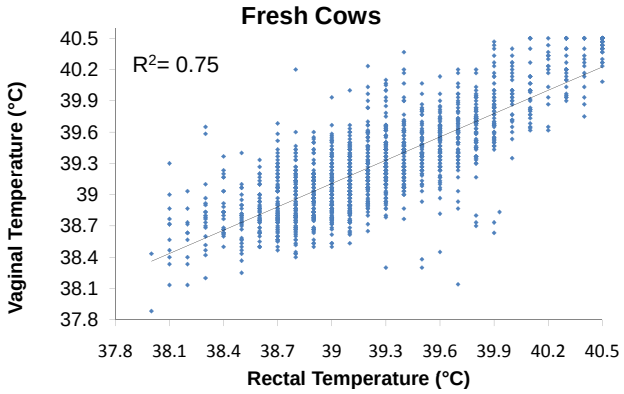
Methods

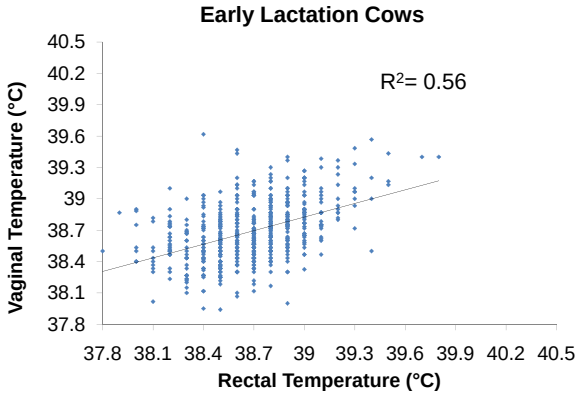
- Body temperatures were monitored in 29 fresh and 13 early lactation cows.

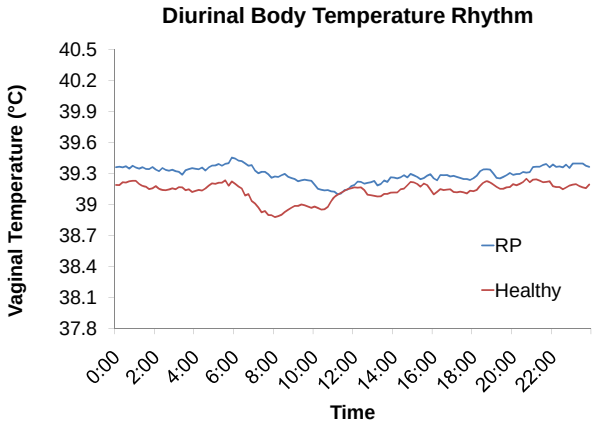


- Rectal temperature was recorded 6 times / d with a digital thermometer.
- Vaginal temperatures were recorded at 10 min intervals using a logger attached to a vaginal controlled internal drug release (CIDR) device.
- Among the early lactation cows 8 were diagnosed with retained placenta (RP). These cows were compared with 8 healthy fresh cows matched for parity.

Results







Discussion and Conclusions

- Loggers used to record body temperatures vaginally show good agreement with temperatures recorded rectally.
- Disagreement between the two estimates may be due to variation in the consistency of the rectal readings.
- Cows with and without RP show a distinctive diurnal temperature rhythm. These diurnal differences add variation to temperature readings, meaning that diagnoses based on a single temperature reading should be treated with skepticism.

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