In a hospital setting, patient temperature measurement (TM) is typically achieved via rectal thermometry (RT), which is accepted as a reliable and accurate estimation of core body temperature. However, obtaining a rectal temperature can be stressful for the patient, may be implicated in the spread of certain diseases, and is contraindicated in patients with perianal wounds or surgeries. For those reasons, it is beneficial to explore alternative means of TM. This prospective study of 250 dogs hypothesized that measurement of axillary temperature (AT) and auricular temperature (OT) would provide a less stressful (but still reliable) means of TM. Heart rate was measured immediately prior to and after each TM, and heart rate elevation (HRE), the percentage change in heart rate between the 2 measurements, was recorded for each patient. In addition to measuring HRE, a score based on several stress behaviors (eg, panting, lip licking, vocalization, defensive behaviors) was given to each patient. HRE was higher with RT than the other measurement techniques. Scores obtained for stress behaviors were highest with RT and lowest with AT. Mean RT, AT, and OT were 38.0°C, 37.0°C, and 37.23°C, respectively. AT and OT were moderately correlated with RT. AT and OT do provide reliable, less stressful means of TM but are influenced by factors such as coat length and gender. Further studies would be needed to evaluate these alternate methods in hyperthermic and critically ill patients.

**Source**

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**Intestinal Dehiscence**

Intestinal resection and anastomosis (R&A) and subsequent dehiscence have been reported to occur in up to 16% of dogs, with a mortality rate ranging from 20%-80%. This prospective study evaluated 35 dogs that had undergone intestinal R&A. Abdominal fluid cultures were taken at surgery and 24 hours after. Glucose and lactate levels in abdominal fluid and blood were measured 24 and 48 hours postoperatively; cytology of abdominal fluid was also performed. Five dogs died or were euthanized within 14 days of surgery because of dehiscence. The remaining 30 were alive at follow up (examination or phone call) at least 14 days postoperatively. Results showed that dogs with positive abdominal fluid cultures 24 hours postoperatively were significantly more likely to experience dehiscence.

**Commentary**
This study evaluated variables in canine intestinal R&A patients with and without closed-suction drains to develop criteria predictive of impending intestinal dehiscence. The rationale for this study is strong: Dehiscence remains the most common life-threatening complication following intestinal R&A; early detection and intervention may result in increased survival. However, it is difficult to draw conclusions from this study that can be applied in a practical setting. Low case numbers and a lack of controls lead to low power, lack of statistical significance, and significant bias. For example, because placement of a surgical drain was left to surgeon preference, drains were more likely to be placed in patients with preexisting bowel perforations which made them prone to intestinal dehiscence. Previous studies have demonstrated high diagnostic accuracy of peritoneal fluid lactate concentration and blood-to-fluid lactate difference in differentiating septic and nonseptic peritoneal effusions. Further, a recent study demonstrated that blood-to-peritoneal fluid glucose and lactate difference might not be reliable indicators of sepsis when evaluating fluid collected with closed-suction drains. A stronger study would include a larger number of patients and would control (or randomize) for placement of a closed-suction drain.—Sara A. Colopy, DVM, PhD, DACVS

**Source**

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**Research Note: More Than One Way to Take a Temperature**

In a hospital setting, patient temperature measurement (TM) is typically achieved via rectal thermometry (RT), which is accepted as a reliable and accurate estimation of core body temperature. However, obtaining a rectal temperature can be stressful for the patient, may be implicated in the spread of certain diseases, and is contraindicated in patients with perianal wounds or surgeries. For those reasons, it is beneficial to explore alternative means of TM. This prospective study of 250 dogs hypothesized that measurement of axillary temperature (AT) and auricular temperature (OT) would provide a less stressful (but still reliable) means of TM. Heart rate was measured immediately prior to and after each TM, and heart rate elevation (HRE), the percentage change in heart rate between the 2 measurements, was recorded for each patient. In addition to measuring HRE, a score based on several stress behaviors (eg, panting, lip licking, vocalization, defensive behaviors) was given to each patient. HRE was higher with RT than the other measurement techniques. Scores obtained for stress behaviors were highest with RT and lowest with AT. Mean RT, AT, and OT were 38.0°C, 37.0°C, and 37.23°C, respectively. AT and OT were moderately correlated with RT. AT and OT do provide reliable, less stressful means of TM but are influenced by factors such as coat length and gender. Further studies would be needed to evaluate these alternate methods in hyperthermic and critically ill patients.

**Source**