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CHANGES IN LOCAL TEMPERATURE DURING THE SECOND INTENTION HEALING OF A WOUND IN A FOAL: CASE REPORT

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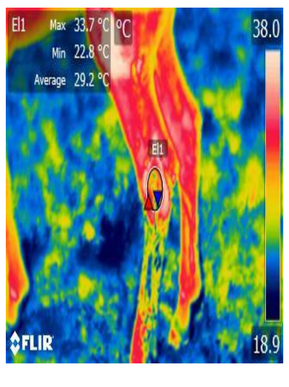
Abstract:*Infrared termography can be used on animals as a noninvasive method to evaluate the physiologic and pathologic changes in body surface temperature in correlation with some conditions, including infection and inflammation. During the 3 phases of secondary intention the wound local temperature has undergone changes. No major complication was registered during the healing process. Using the thermography we monitoring the temperature of the wound and can estimate the tendency of heal.*

• Introduction

The roots of Thermography are ancient, a papyrus from 1700 BC documents the association of temperature with disease (8). Thermographic images reflect the alterations in the circulation of deeper tissues. The changes in temperature are identified as either 'hot spots' or 'cold spots (3).

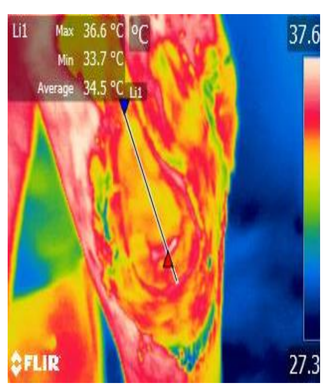
• Material and method

A four months Frisian breed foal that present an old wound on the lateral face of the hock was included in study and benefit by a second intention healing. The model camera use for thermography was FLIR E50 device, kept at 1 meter distance of the horse to obtain the image. The soft used for photos interpretation was FLIR Tools and the IR resolution was 240 x 180 mm.



• Results and discussions

Between the healing phases there was register temperature with a variation of 6 °C. In the remodeling phase a spot (red point) was identified on the wound surface and after three days a fistula appeared.



Wounds present differential increased temperature of +1 C° to +3 C° apparently indicate not an infection but a healthy healing inflammatory state (7).

Conclusions

During the healing phase the local temperature undergone variation in correlation with the healing process.

The thermography highlight the blood flow in the deeper tissue and check the possible complication.