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«Use of infrared thermography to control osteoreparative and integrative processes during implantation in animals»

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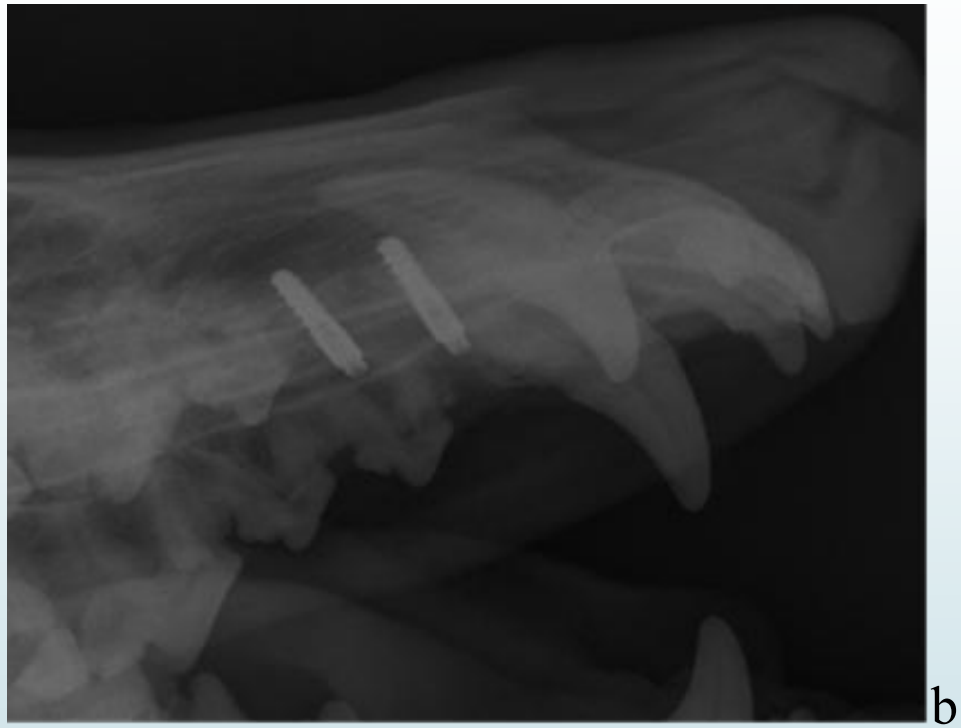
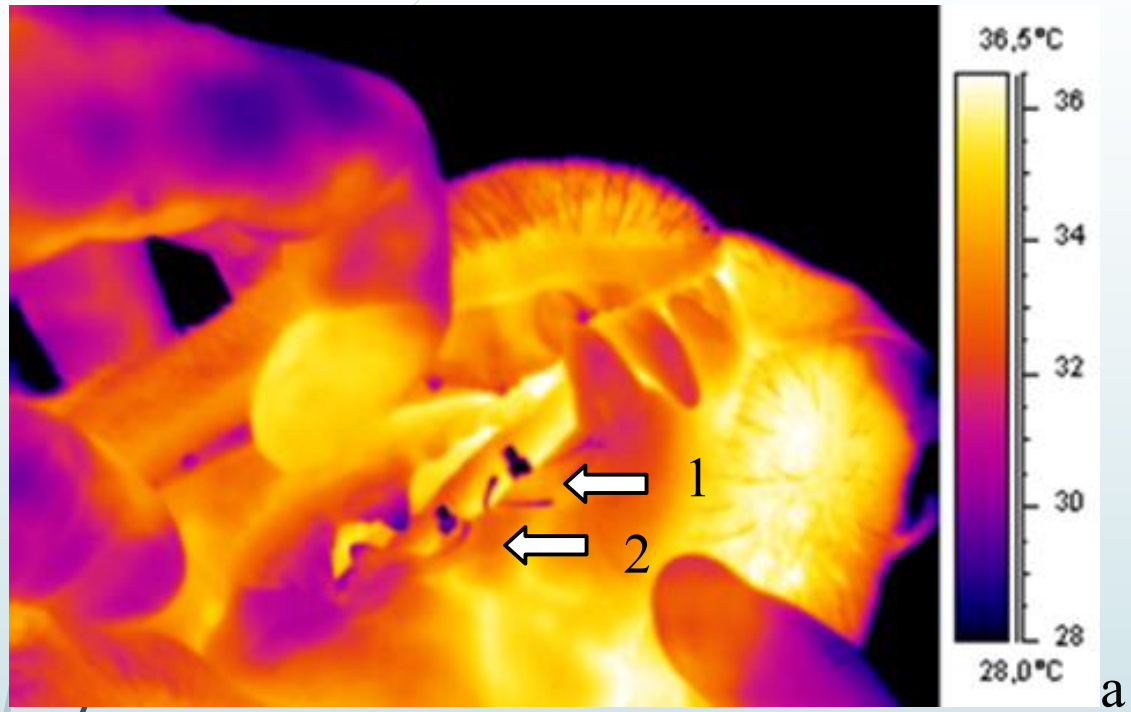
The aim of our study was a comprehensive assessment of osteoreparative and integrative processes using thermography when implantation in dogs.

a

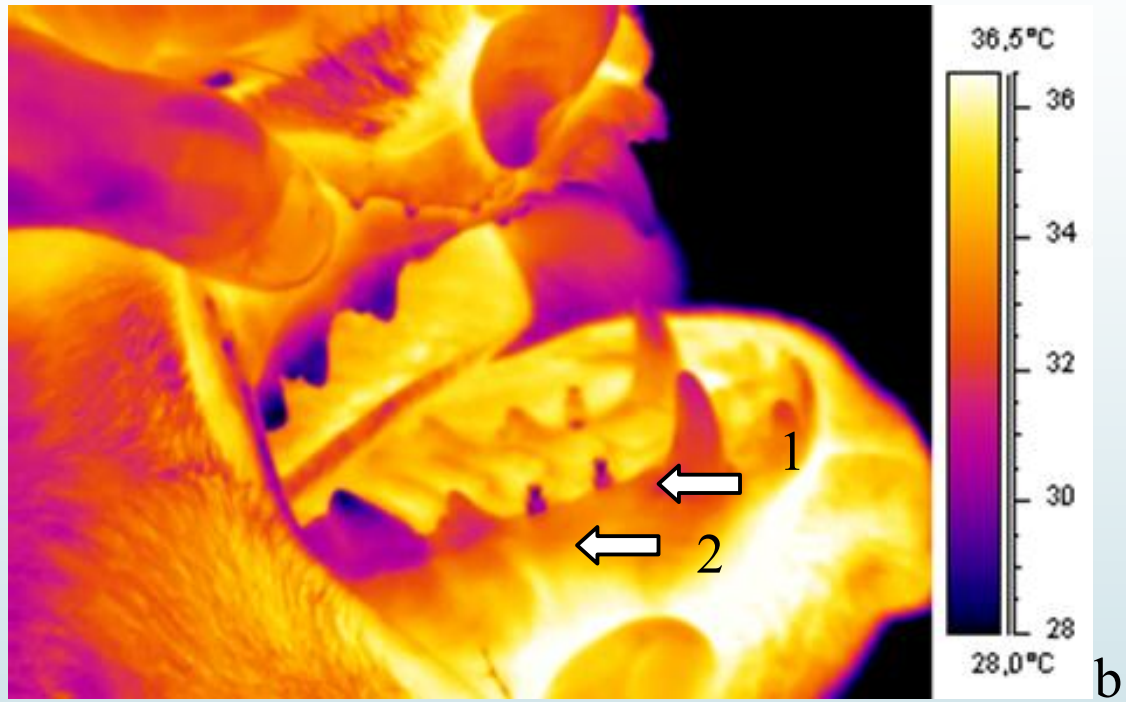


b

Figure 1. X-ray 6 (a) and 19 (b) months after implantation.



a



b

Figure 2. Thermography 1 day (a) and 25 days (b) after surgery (1-control, 2-experiment).

A

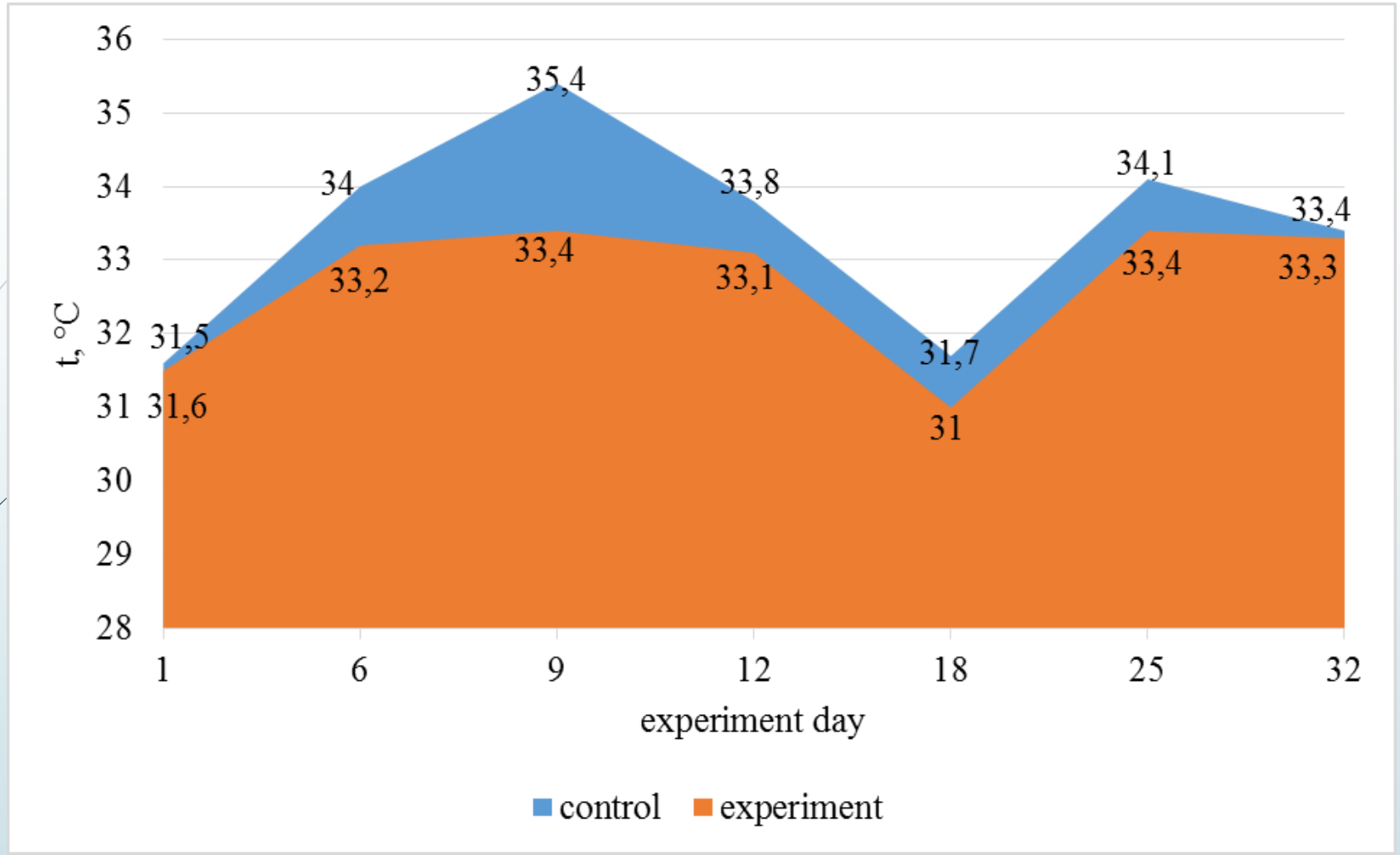


Figure 3. The dynamics of the temperature values.

Conclusion

Thus, our data indicate that, despite the high biocompatibility both of experimental and control samples, qualitative and quantitative differences in thermograms, corresponding to the characteristics of implant coatings, were established. Therefore, the thermal imaging method is effective for studying the response of tissues to implantation materials, which makes it possible to recommend thermography as a non-invasive method for dynamic and comporative analysis of osteoreparative and integrative processes during implantation in animals.