Heat Transfer of Impression Plasters to an Implant-Bone Interface

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IMPRESSION PLASTER IS OFTEN USED IN DENTISTRY BUT LITTLE IS KNOWN ABOUT ITS HEAT TRANSFER CAPABILITY TO AN IMPLANT-BONE INTERFACE. THE PURPOSE OF THIS STUDY WAS TO MEASURE THE HEAT TRANSFER OF TWO DIFFERENT IMPRESSION PLASTERS TO AN IMPLANT BONE INTERFACE.

METHODS AND MATERIALS

A rectangular cylindrical integral impression material, 4 cm in diameter and 10 mm in length, was used in this in vitro study. The impression material was packed between an implant analog and a metal block. The temperature at the implant analog was measured with a thermocouple. The results were compared with a standard impression material.

RESULTS

The highest temperature recorded at the implant analog was 37°C, which is normal body temperature. The impression material packed within the implant analog was not significantly different from the control material.

CONCLUSIONS

The study demonstrated that the heat transfer of impression materials is not significantly different from the control material. The results of this study are consistent with previous studies that showed that the heat transfer of impression materials is not significantly different from the control material.

Acknowledgments

The authors thank Dr. Michael B. Friedland for his assistance.

References


