Response to Letter to the Editor

Abu Bakr El-Bediwi\textsuperscript{a} / Abeer El-Fallal\textsuperscript{b} / Samah Saker\textsuperscript{c} / Mutlu Özcan\textsuperscript{d}

We thank Ayyıldız et al. for their insightful comments and giving us the opportunity to clarify a number of points from our work. We agree with the fact that the medium where the specimens were kept during exposure to MRI may have a detrimental effect on the absorption rate of the bulk material itself, depending on its nature as well as the interface as in the case of bilayered systems, simply as a consequence of radiofrequency-induced heating and temperature conductivity of the medium. In order to simulate oral conditions in our study, MRI exposure was performed while the specimens were kept in saline solution.\textsuperscript{5} The use of phantoms such as gelled gelatin, polyacrylic acid in distilled water, or saline phantom have been shown to affect specific absorption rate in previous studies where solely metallic materials were of focus.\textsuperscript{2-4} To our knowledge, the current American Society for Testing and Materials (ASTM) standard does not recommend a specific phantom for metal-ceramic combinations during MRI exposure. This study was primarily focused upon observation of a case undergoing frequent exposure to MRI and experiencing repeated fracture of the veneering ceramic of her metal-ceramic restoration. We considered saline to be a closer medium to saliva in our in vitro study.\textsuperscript{5} Certainly, it would be interesting to look at the phantom’s effect on the interfacial strength of metal-ceramic combinations in future studies, but most importantly, we are currently increasing our clinical observations of patients frequently exposed to MRI to clarify whether MRI exposure is a confounding or a potential factor for such failures.

Dr. Samah Saker

Dr. Samah Saker

REFERENCES