

The role of argon in dentistry

Dear Editor,

I read with great interest the article “The role of argon in stroke” by Li et al.¹ in the *Medical Gas Research*. I would like to suggest the role of argon in dentistry with emphasis on recent studies on cell attachment and bacterial decontamination on peri-implantitis contaminated implant surface, bactericidal role in oral bacteria biofilm and role in cell adhesion on zirconium.

Plasma of argon increases cell attachment and bacterial decontamination on peri-implantitis contaminated implant surface by promoting osteoblast attachment and spreading.² Six years postloading results of a randomized controlled trial in periodontally healthy patients showed plasma of argon may represent a positive alternative to minimize peri-implant bone resorption and longitudinally stabilize esthetic results.³ Atmospheric non-thermal argon/oxygen plasma may deactivate oral bacteria biofilm by decreasing bacterial viability and reducing their hydrophobicity and co-aggregation behaviour.⁴ It was evident from recent studies that argon plasma is the viable method for strong cell adhesion on zirconium.^{5,6}

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