



matrix[®] SCIENTIFIC WHITE-PAPER

Evaluating the mechanical stability of 3D printed crowns on matrix[®] implants



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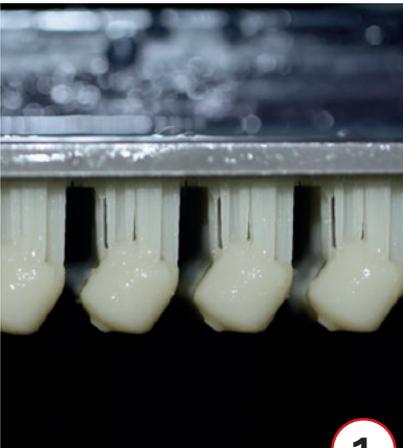


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MATERIALS AND METHODS



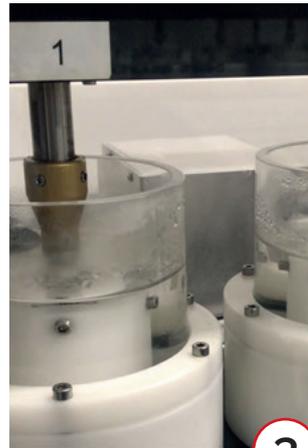
1

Printing of the test crowns with NextDent C&B material...



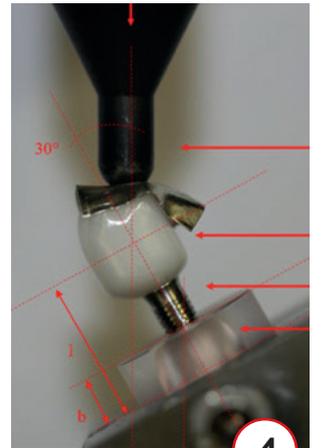
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... on Ti-Base and matrix[®]...



3

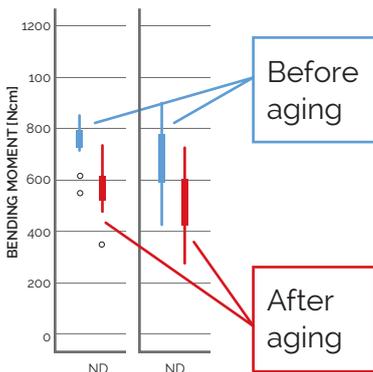
...followed by artificial aging simulation...



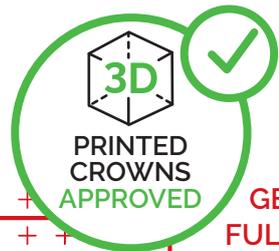
4

...breakage test to determine mechanical stability.

RESULTS:



- ✗ No fractures after aging of 600.000 cycles representing a function of 2.5 years.
- ✗ Similar strength of 3D printed crowns on matrix[®] and Ti-Base, not significance after aging.



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CONCLUSION:

Based on this in-vitro study, 3D printed crowns on matrix[®] showed sufficient mechanical strength for provisional restorations.

