



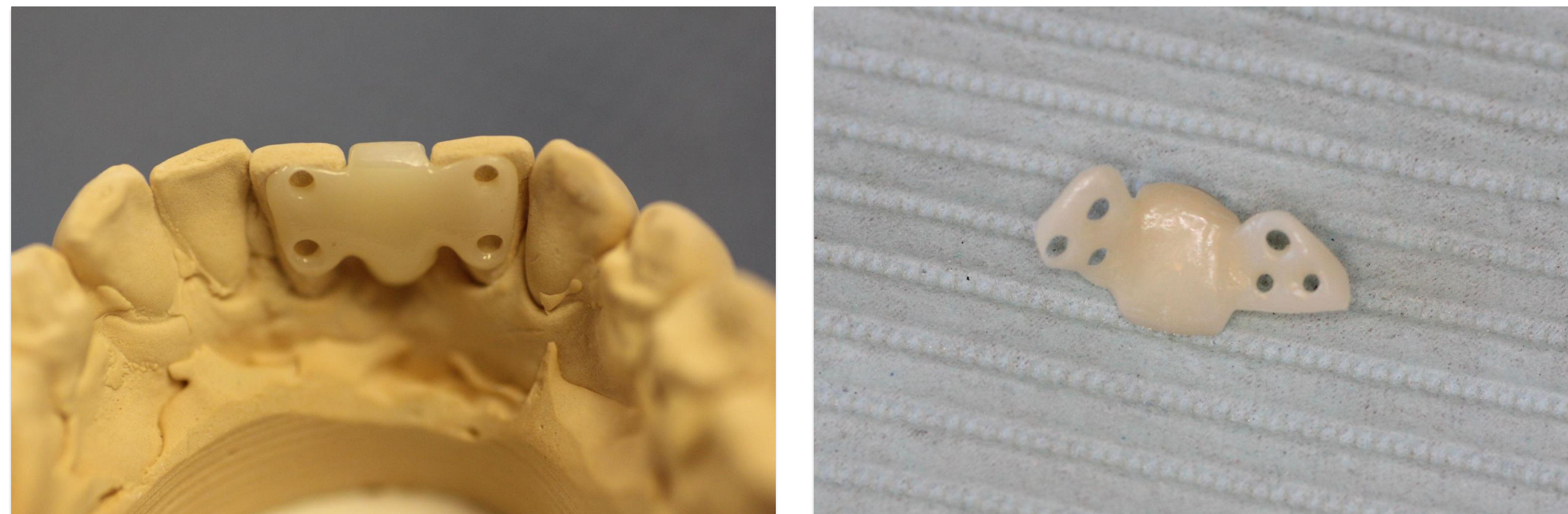
Porcelain Fused to Zirconia Wing Bridge: A Clinical Trial



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INTRODUCTION/BACKGROUND

- This zirconia wing-bridge is a non-invasive treatment alternative for replacing missing anterior teeth.
- Resin-bonded zirconia framework with countersunk holes with a porcelain facing were evaluated for replacing a single anterior tooth.
- The purpose of this study was to determine the retention and durability of these bridges.



METHODS

- Eight patients participated from the Roseman clinic who had a missing anterior incisor with two intact abutment teeth.
- Nine bridges were fabricated and bonded to the lingual surfaces of the patients' abutment teeth.



RESULTS

- The bridges showed to have acceptable durability, reasonable esthetics, and sustainable retention.
- Three different bridges de-bonded at 11 months, 5 years, and 6 years.
- One de-bonding occurred from a fracture around the counter-sunk holes.



CONCLUSIONS/DISCUSSION

- When porcelain fused-to-zirconia wing-bridges are fabricated and bonded according to specifications, they can be a predictable and favorable option.
- This restorative technique can be successful when used as a long-term provisional for future treatment.
- The countersunk holes provided acceptable bond strength but compromised the physical strength of the bridge.