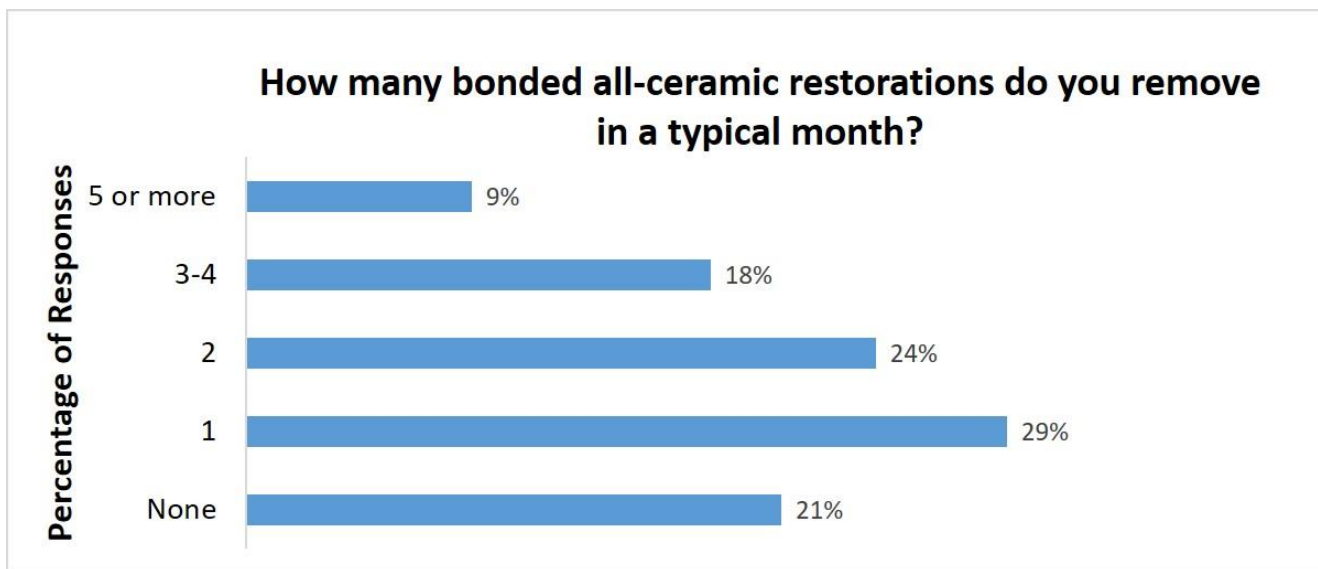


Quick Poll on Removal of All-ceramic Restorations

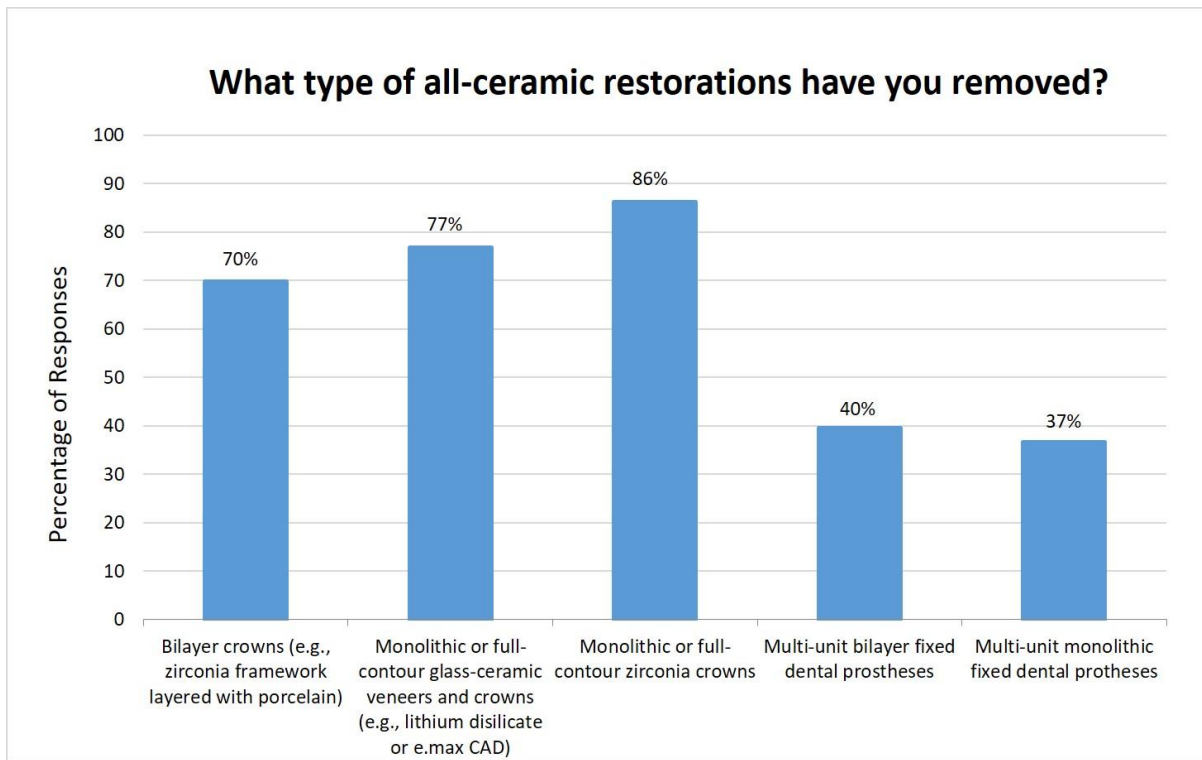
Surface conditioning strategies are available to greatly improve the bonding of all-ceramic restorations [1, 2, 3]. However, for situations such as delamination, unrepairable fracture of the veneer ceramic, recurrent caries, or esthetic failure, the restoration debonding/removal techniques can be time-consuming, destructive, and uncomfortable. Also, when zirconia-based restorations are to be removed, clinicians may struggle to use a reliable method [4].

The Quick Poll results show how commonly the 220 practitioner respondents encounter the removal scenario and their use of laser and other tools for this purpose.

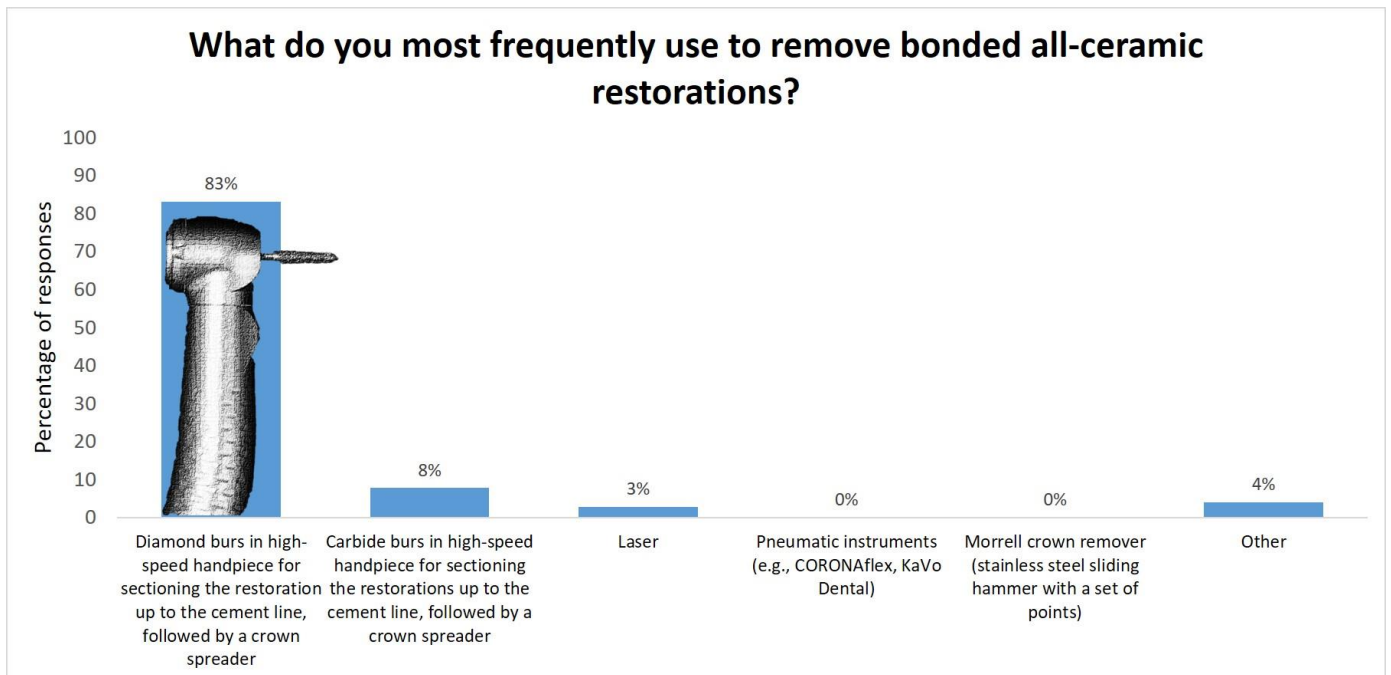
- Per month, about 21% of respondents do not encounter the need to remove all-ceramic restorations. About 29% remove one, 24% two, 18% three to four, and about 9% five or more.



- Respondents have removed in the past full-contour zirconia crowns (86%) and monolithic glass-ceramic veneers and crowns (77%) more frequently, followed by bilayer crowns such as zirconia framework layered with porcelain (70%). In contrast, multi-unit bilayer or monolithic fixed dental prostheses have been encountered less frequently.

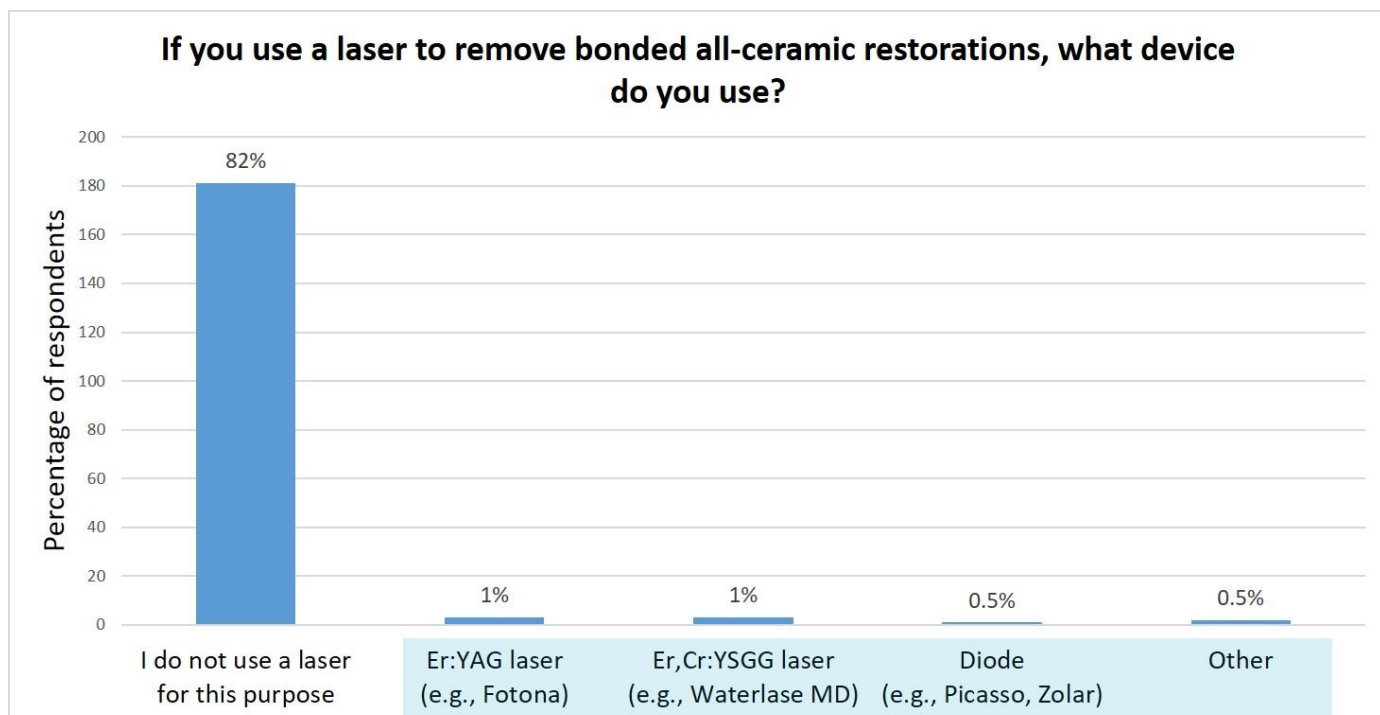


- The use of diamond burs in a high-speed handpiece (83%) is by far the preferred method for removing all-ceramic restorations compared to other techniques, such as carbide burs (8%) and lasers (3%).



- The laser of choice of 1% of respondents was the erbium-based laser. One respondent cited using the diode and Nd-YAG laser.

- Despite its limited use for this purpose among the respondents, laser technology is preferred over other techniques because it is quicker (3%), produces less or no damage to the underlying and adjacent tissue (4%), causes fewer vibrations or sparks (3%), and enables reuse of the ceramic restoration (3%). About 3% of respondents rated the laser as the apparatus better accepted by the patient.



Why do you prefer the laser over other techniques?

- The laser is quicker (3%)
- The laser is better accepted by the patient (3%)
- The laser produces less or no damage to the underlying structure and soft tissue (4%)
- The laser enables restoration reuse (3%)
- The laser does not cause vibrations or sparks (3%)



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