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[\[PDF \(2894K\)\]](#) [\[References\]](#)**Bonding strength of autopolymerizing resin to nylon denture base polymer**

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Abstract:

This study aimed to investigate the shear bond strength of an autopolymerizing resin to a nylon denture base polymer (Lucitone FRS: LT) subjected to different surface treatments, and the results thereof compared with a heat-polymerizing resin and a polycarbonate polymer. Specimens were divided into five groups according to the surface treatment method: polishing (#600), sandblasting, adhesive primer application (resin primer), sandblasting + adhesive primer application, and tribochemical coating (Rocatec system). Following which, specimens were subjected to a shear bond strength test and Si concentrations were measured using an electron probe microanalyzer (EPMA). On shear bond strength, that of LT with tribochemical coating was significantly higher than the other groups. On EPMA results, the surface of LT with tribochemical coating was found to be covered with a silica film. Therefore, findings in this study indicated that silica-coating by Rocatec system was effective in improving the bond strength of nylon denture base polymer to autopolymerizing repair resin.

Key words:

[Nylon denture](#), [Silica coating](#), [Bonding strength](#)

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