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**Injection processing of a  $\text{Li}_2\text{Si}_2\text{O}_5$  dental glass-ceramic**

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There is now an increased demand for all-ceramic dental restorations due to their several advantages, and new dental materials and processing techniques have been systematically investigated. Among these materials, lithium disilicate glass-ceramics stand out for use as dental prostheses, due to their wonderful aesthetics, excellent biocompatibility, compression resistance, color and chemical stability, thermal conductivity similar to the dental tissues and similar appearance and hardness of natural teeth. Among several forming techniques, injection based on the lost wax method plus external pressure and high temperature is able to shape this material into the desired geometry, and assists in preventing pores, promotes a good dispersion of the crystalline phase within the glass matrix and results in high mechanical properties. The heat treatment for controlled crystallization can be made before or during the injection process. The commercially used procedure makes the injection of the glass-ceramic (sample already heat treated). In this study we compare the properties of molded samples using the parent glass with the glass-ceramic (present practice). The injected samples were characterized by scanning electron microscopy, hardness and fracture toughness by Vickers indentation. Our first results indicate that injection of the parent glass results in improved microstructure and mechanical properties. Keywords: glass-ceramic, glass, injection, fracture toughness, lithium disilicate