Efektivitas alat tekan mini-45 untuk mengurangi tingkat porusitas akrilik autopolimerisasi

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Abstrak

Polymerization of a self acrylic resin often done improperly. In daily practice, some put in room temperature water, some in warm water, but many of them left it in the open air. In the dental laboratory, a pressure cooker was used in order to get a better result. However, many clinicians did not like to use it due to the cost and inconveniency. In order to get an effective and less expansive equipment, a simple 'Mini Pressure Chamber-45' (Alat Tekan Mini-45) was developed. It wa made from a 4 inch PVC (about 10 cm in diameter). The mechanism of this equipment was to give a pressure to the resin during polymerization through a valve which was connected to the dental compressor. The pressure given was about 1 kg/cm2, and it was given in 5 minutes. The purpose of this study was to show the effectiveness of MPC-45 in reducing the porosity of the self cure acrylic resin in compare to the other kind of treatment. There were 5 groups of treatment and each group consisted of 30 specimen. In group 1, the samples were put in the open air during polymerization. In group 2, samples were dipped in the room temperature water, and in group 3 samples were dipperd in warm water (40.1°C). In group 4, samples were dipped in a pressure cooker for 10 minutes. In group 5, samples were dipped in MPC-45 under 1 kg/cm2 pressure for 5 minutes. The result showed that MPC-45 was the most effective method in reducing the porosity of the self-cure acrylic resin.