ABSTRACT

Background. Denture mouldings are always started by moulding process using impression materials. Those materials are generally reactive to heats and chemical substances which used for desinfectan, in addition of giving effects into its function and dimention. One of many numbers of desinfectan which can be used for alginate impressions is Natrium Chloride (NaCl). NaCl which is known as salt solution, is a high-osmotic substance that may provokes a movement of $H_2O$ from a low into a higher concentration. In other way, the granting of NaCl can increase the water resorption in definite times. From its characteristics, there is an effect of alginate impression casting’s delay after having salt solution (NaCl) sprays to the linear dimensional changes of working model. If there is a changing in the inter-preparation linear dimension, it may gives some difficulties on restoration insertion of the prepared teeth. Purpose. To assess the time of alginate impression casting’s delay after having salt solution (NaCl) sprays which can affect the changes of inter-preparation linear dimension of the working model. Method. Research samples are divided into 4 groups. The impressions which are sprayed by aquades become the group of control. The first, second and third group are sprayed by NaCl solution with the difference of mould casting’s delay time. The first group is given 5 minutes of delays, while the second group is 7.5 minutes, and the third group has 10 minutes delays. Then the all 3 groups changes of inter-preparation linear dimension is compared to the group of control. Results. There is a significant difference of the inter-preparation linear dimension changes among the third group and the group of control. Conclusion. The alginate impression casting’s delay which has been sprayed by salt solution (NaCl) for about 10 minutes may causes the inter-preparation linear dimensional changes of working model.

Key words: casting’s delay, Alginate, Salt solution (NaCL), Inter-preparation linear dimension