

## **Abstract**

### **Comparison of the accuracy of implant fixture\_level impression with two types of addition silicone impression materials with and without splints with parallel and 15 degrees angles**

**Introduction:** Currently, replacing missing teeth with intraosseous implants has become a routine treatment. The prosthetic components on which the implant is mounted must be passive so that static force is applied to the implant and bone, therefore, extreme care must be taken in all stages of prosthesis construction from the molding stage. The accuracy of implant molding depends on various factors. Among these cases, molding technique and molding material are two important factors in the accuracy of implant molding. Considering the significant role of accurate molding in the success of implant treatments through the preparation of prostheses with high compatibility and without tension, and also considering the increase in the price of consumables in the field of dentistry and the availability of these two molding materials, the aim The present study compares the accuracy of molding on the surface of the implant fixture with two types of molding materials, Bonasil and Panasil.

**Methods and material:** patient's jaw, we use four acrylic models inside the index (to standardize the molding process). After placing the impression copings, we mold each of them once with Bonasil molding material and once again with Panasil molding material.

Finally, we will have 8 subgroups, after placing the analogs and pouring the plaster cast of each of these subgroups, the accuracy of molding of Panasil and Bonasil materials, as well as the effect of splinting and placement angle, will be compared and evaluated with the original model.

**Results:** According to the findings of the research, it can be claimed that there is no significant difference between the molding accuracy of the implant fixture with Panasil and Bonasil additive silicone molding materials in the studied groups ( $\text{sig} < 0.05$ ).

**Conclusion:** there is no significant difference between the molding accuracy of the implant fixture with Panasil and Bonasil additive silicone molding materials.

**Keywords:** Implant, polyvinyl siloxane, splint, open tray molding, analog