

Poster Presentation

On-site

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Messe Nagasaki 2F Convention Hall 1+2

**Case Reports or Series**

**[P-132 (E) ] A case study of an adhesive restoration supported by the  
"Adhesion Guided Device" as a bonding aid**

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**[Introduction]**

For 19 years, cantilever-adhesive bridges made of zirconiumoxide have been manufactured for Resin-Bonded Fixed Dental Prostheses (RBFDPs), but they have faced various problems when bonding RBFDPs.

One critical issue is the difficulty of accurately repositioning RBFDPs from the model of the abutment teeth in the oral cavity. This occurs because the resin cement layer interferes with precise placement, and operators cannot ensure alignment using only their fingertips. To address this issue, an Adhesion Guided Device (AGD) was developed to facilitate accurate bonding (Fig.1,2) <sup>1)</sup>.

This article reports on a case in which the AGD was successfully employed for bonding of RBFDPs in a Japanese patient.

**[Case Summary and Treatment Details]**

The patient primarily complained about aesthetic impairment caused by the absence of 23. Therefore, we planned RBFDPs with 24 abutment teeth, developed a treatment plan for aesthetic restoration, and obtained the patient's consent.

The AGD was created by forming and polymerizing the base arms on the left and right second premolars with light-curing tray resin. A uniform layout is ensured by this AGD arrangement, which must be evenly placed and stable to prevent any rattling in the abutment tooth cavity.

**[Progress and Discussion]**

The use of the AGD during bonding ensured that the RBFDPs could be confidently reinserted and bonded in the oral cavity.

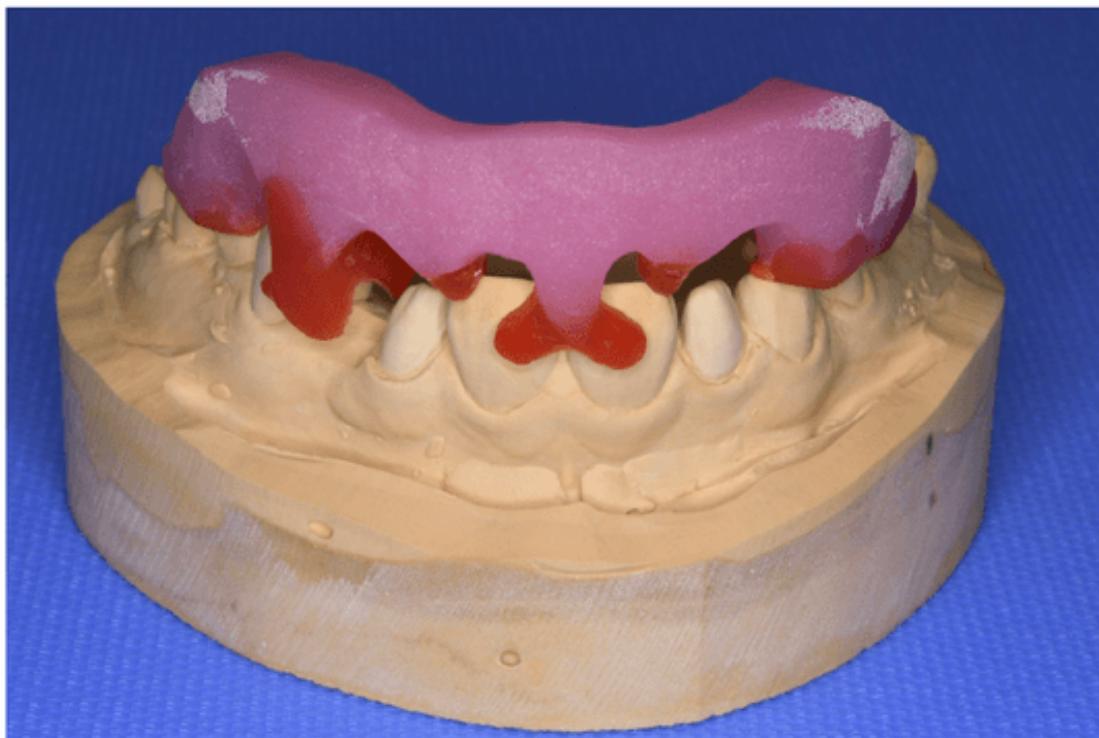
The RBFDPs were evidenced by the fact that there were no unnecessary steps after bonding, and the patient felt no discomfort and the lingual sensation was good.

The AGD, which targets to be placed in the abutment tooth in the same position as on the model, is a device that solves the problems of the practitioner during bonding.

**[References]**

1) Kern M, RBFDPs: Resin-Bonded Fixed Dental Prostheses Minimally invasive-esthetic-reliable. New Malden: Quintessence Publishing; 2018,139-186.

(Consent was obtained from the patient/subject)



(Fig.1) AGD constructed on the model



(Fig.2) AGD trial fitting: Intraoral view