

TIPS FROM OUR READERS

## A technique to verify implant abutment position intraorally by using a vacuum thermomolded guide



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The precision of fit at the implant-abutment interface is an essential criterion for the long-term success of dental implants.<sup>1,2</sup> Implant abutment systems are designed to accommodate definitive restorations in a single position.<sup>3</sup> Therefore, accurate transfer and positioning of implant abutments intraorally from the definitive cast is crucial to avoid technical complications caused by a misfit between the prosthesis and the abutment.<sup>4</sup> Although several methods have been reported in the literature for accurate positioning of the abutment,<sup>5-13</sup> this article presents a straightforward technique that can assist the clinician in positioning and verifying the implant abutment orientation intraorally by using a vacuum thermomolded guide.

### TECHNIQUE

1. Remove the definitive restoration from the abutment (TS Angled Abutment; Osstem Implant Co), and fabricate a vacuum thermomolded guide from a 2-mm resilient polyvinyl thermoplastic sheet (Easy-Vac Gasket; 3A Medes) over the implant definitive cast with the abutments in accurate position.
2. Mark the screw access hole location on the thermomolded sheet guide, and drill a hole through the marked position such that the abutment driver has direct, unrestricted access to the screw hole (Fig. 1).
3. Position the abutments on the guide such that the access hole corresponds to the drilled location. Place the guide along with the abutments in the patient's mouth. In situations where multiple abutments with

different insertion paths are being restored, the clinician may choose to insert each abutment separately.

4. Ensure the guide is seated completely, and screw the abutment with the vacuum guide in place to the desired torque<sup>14</sup> (Fig. 2).
5. Remove the guide, and verify proper seating of the abutment with periapical radiographs before cementing the definitive restoration.

The remaining teeth ensure proper seating of the thermomolded guide in the patient's mouth. Therefore, this technique becomes challenging for completely edentulous patients.



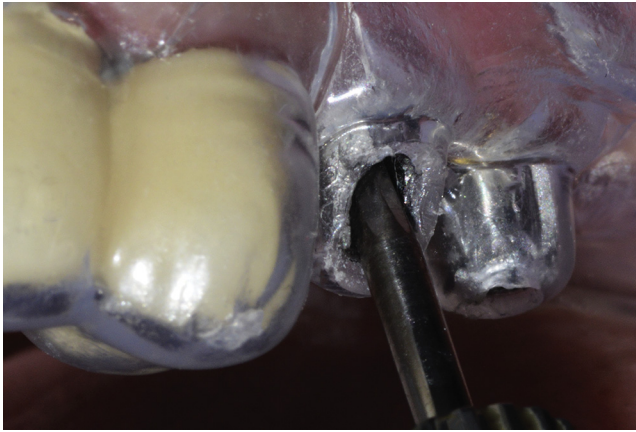
Figure 1. Vacuum-thermomolded guide on definitive cast.

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**Figure 2.** Implant abutment with vacuum-thermoplastically molded guide placed intraorally.

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### CRediT authorship contribution statement

**Kevin George Varghese:** Conceptualization, Writing – original draft, Visualization. **Nirmal Kurian:** Writing – review & editing, Visualization, Project administration. **Nitasha Gandhi:** Supervision, Resources. **Jemin Elizabeth Mathew:** Writing – review & editing, Resources.

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