



Digitally Designed Two-part Verification Jig and Provisional to Manage Angulated Implants

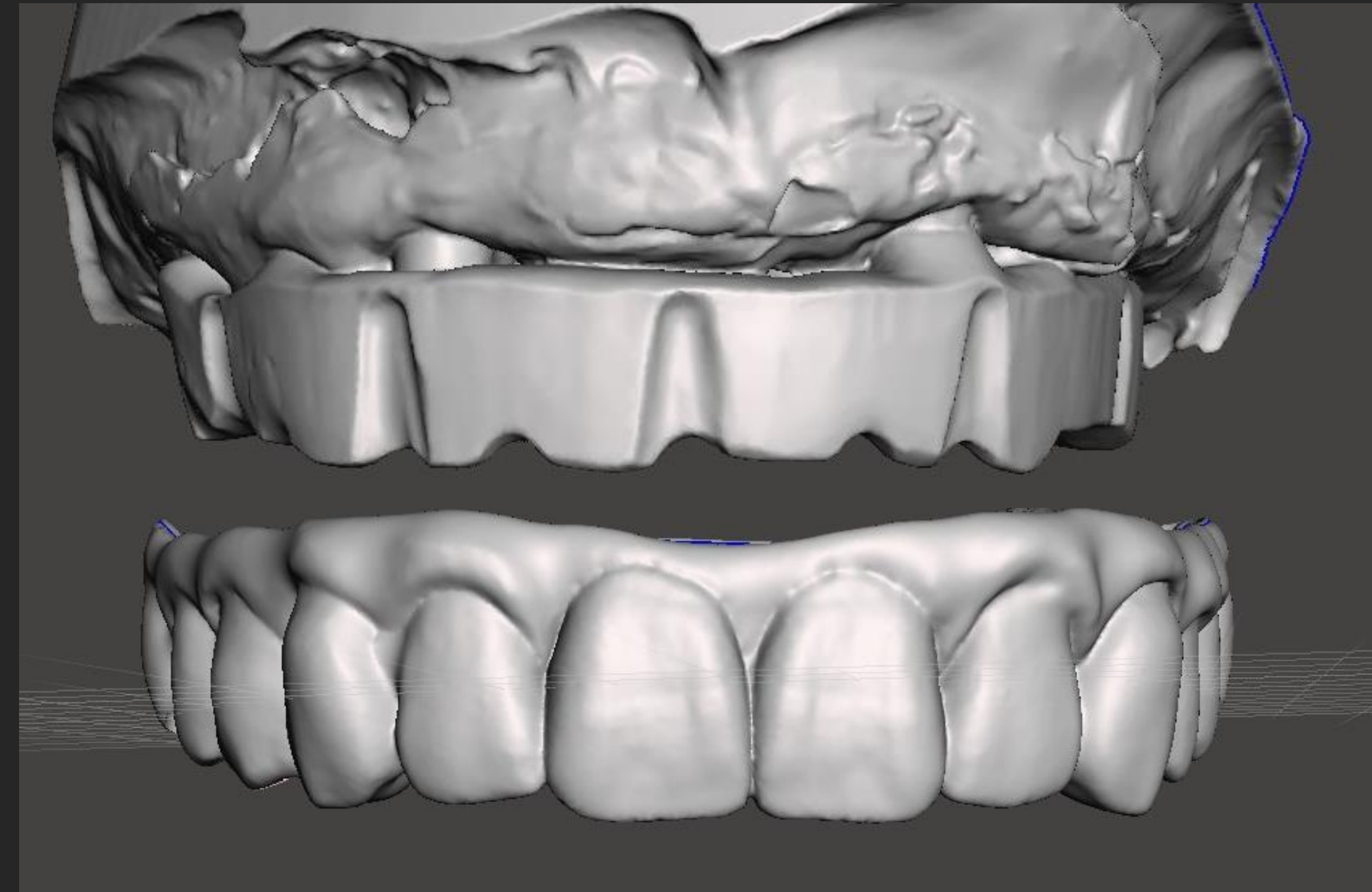
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Introduction

Restoring an arch with severely angulated implants can be challenging.¹⁻² To prevent the need for multiple try-ins and delay in restoration delivery, a two-part interim acrylic restoration was fabricated. The first part, a milled acrylic bar that could be sectioned and reluted intraorally, served as the verification jig, and the second part, a provisional teeth superstructure, could be cemented onto the bar.

Material and Methods

The master cast of the maxillary edentulous ridge was scanned using a desktop scanner. Exocad was used to design a PMMA acrylic bar on temporary cylinders attached directly to the implants.



A PMMA provisional superstructure was designed to fit over the bar. The bar was tried in, sectioned, and reluted as to achieve passive fit.



The superstructure was adjusted until it fit over the bar and seated completely, Occlusal vertical dimension checked, and occlusion adjusted.



Results

Once passivity was achieved and the cast was verified. The superstructure was cemented onto the bar extraorally, and the patient was able to leave with the interim prosthesis. This prevented the need for a second verification appointment.



Conclusion

The use of a verification jig that can be utilized as a substructure for the prosthesis reduced chair time and improved clinical outcomes. This technique can serve as a tool to verify accuracy of a master cast with severely angulated implants while simultaneously allowing the patient to leave the appointment in a provisional.

References

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