

***Computer Vision Techniques To Compare
Accuracy Of Surgical Guides In
Achieving Implant Parallism
In Edentulous Mandible***

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Removable Prosthodontics

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Dedication

I dedicate this work to

My Parents

My Brother & My Sister

For their love, support and encouragement over the years

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Abstract

Purpose:

To compare accuracy of different types of surgical guides to achieve parallelism between two implants placed between mental foramina in completely edentulous patients utilizing computer vision techniques.

Materials and methods:

An acrylic resin complete denture was made to facilitate the fabrication of different types of surgical guides.

Results:

CAD/CAM and base plate surgical guides were the most accurate.

Conclusion:

all the types that were used in this study achieved accepted range of inclination in the frontal, lateral and occlusal views. CAD/CAM and base plate surgical guides showed the best result in the occlusal view and considered the most accurate types in achieving implant parallelism in edentulous mandible.

Key words:

Positioning guides, Diagnostic guides, Dual purpose guide, Surgical guide, Implant alignment, Stereolithographic surgical guide.