

Hybrid bone and mucosa-supported surgical guide : a case presentation

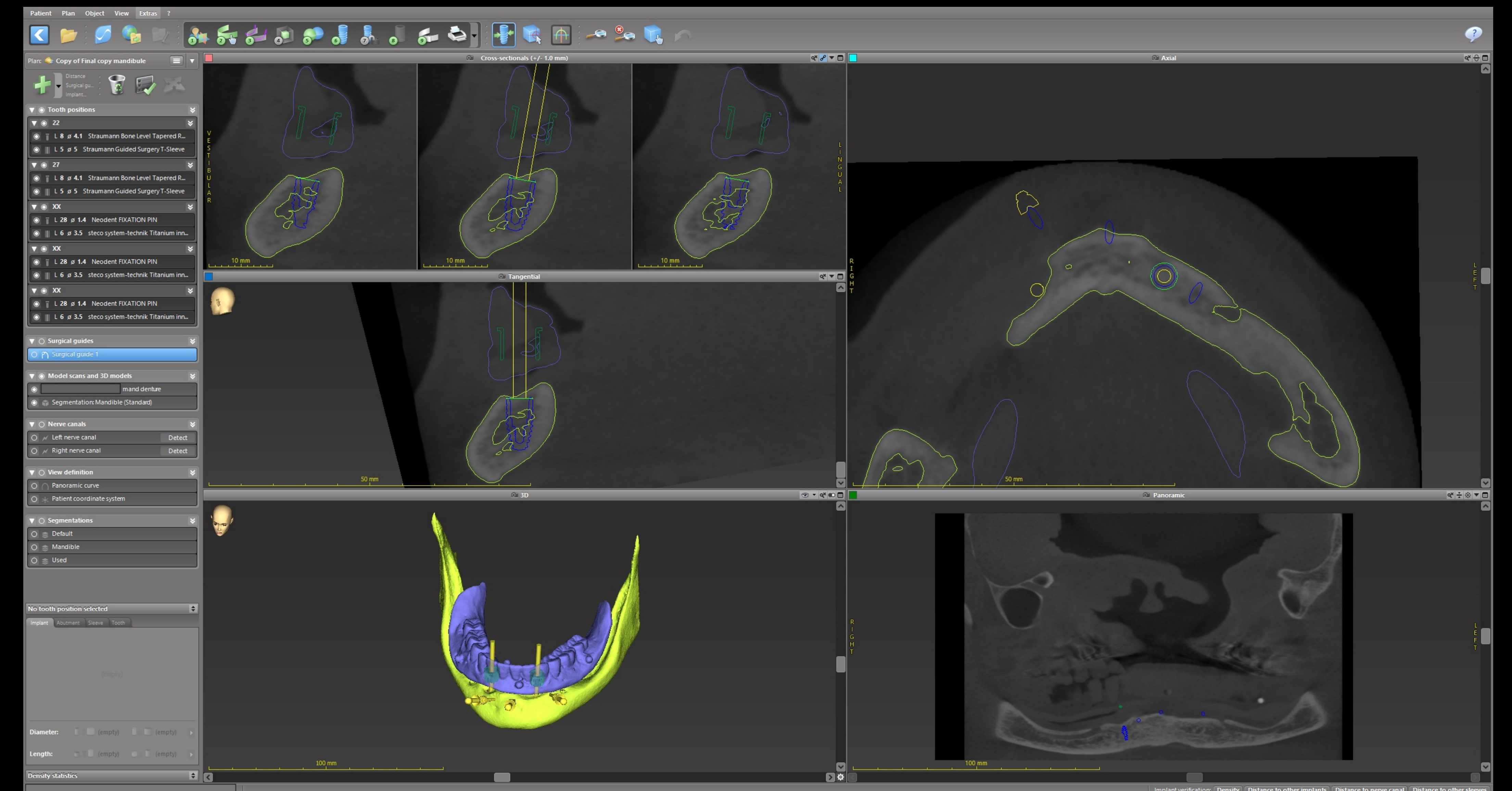
Charline Cervellera, Denny Chao, Ting-Ling Chang

Introduction :

CAD/CAM surgical guides are used for more accurate **implant placement**

Importance of the **tissue** supporting the surgical guide

The **aim** of this case presentation was to present a
hybrid surgical guide supported by both **bone** and **mucosa**
to place 2 implants in an **extremely resorbed mandible**



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Clinical case :

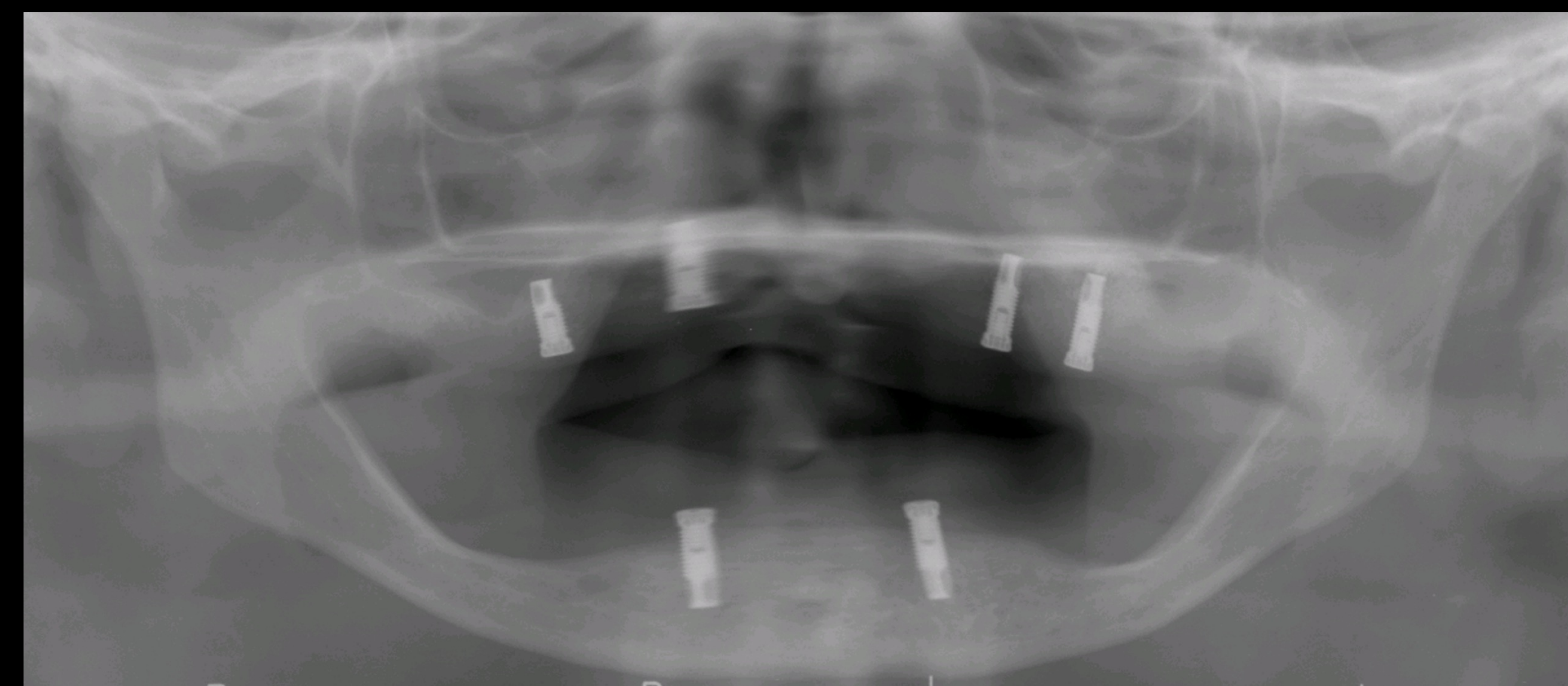
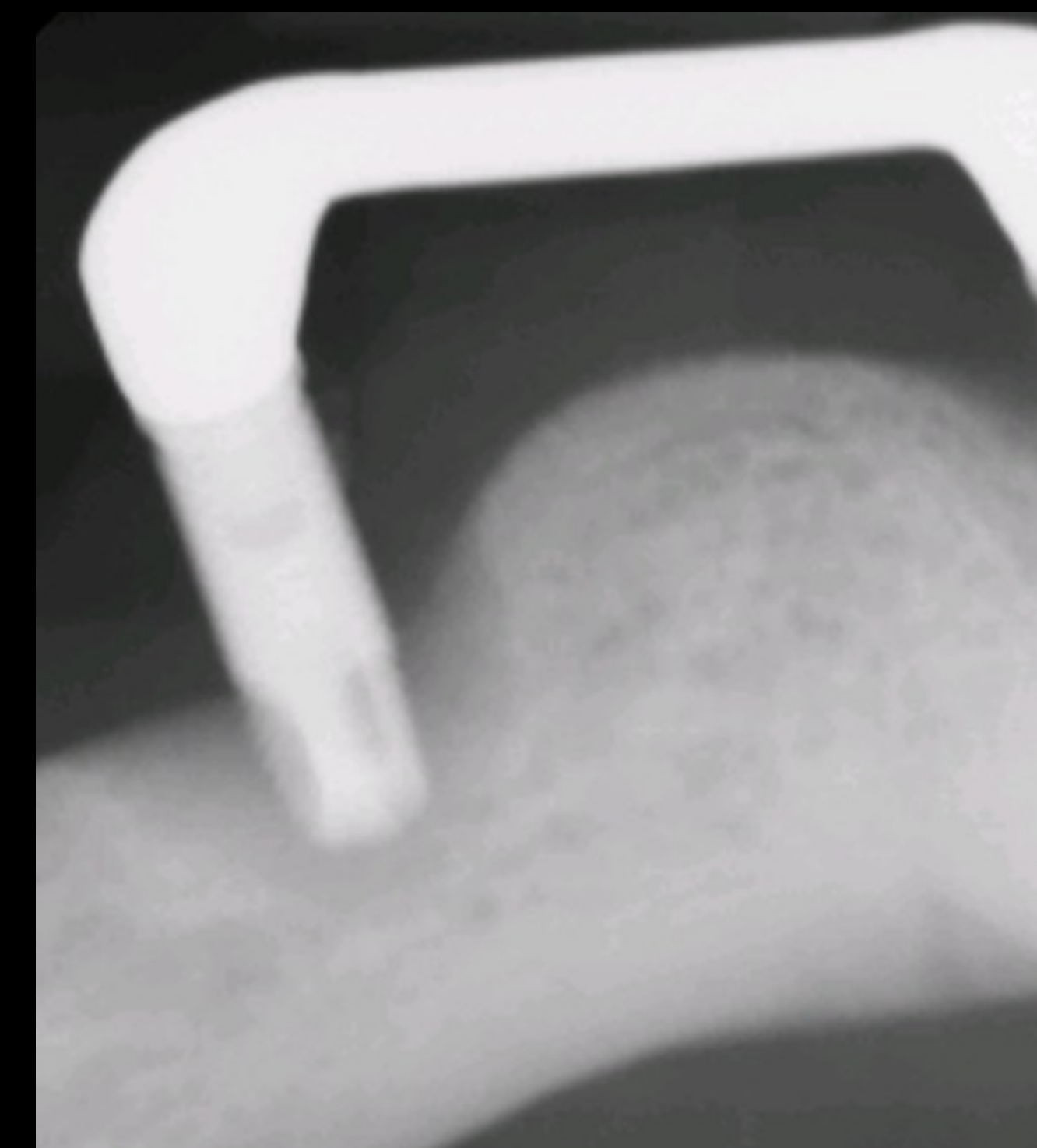
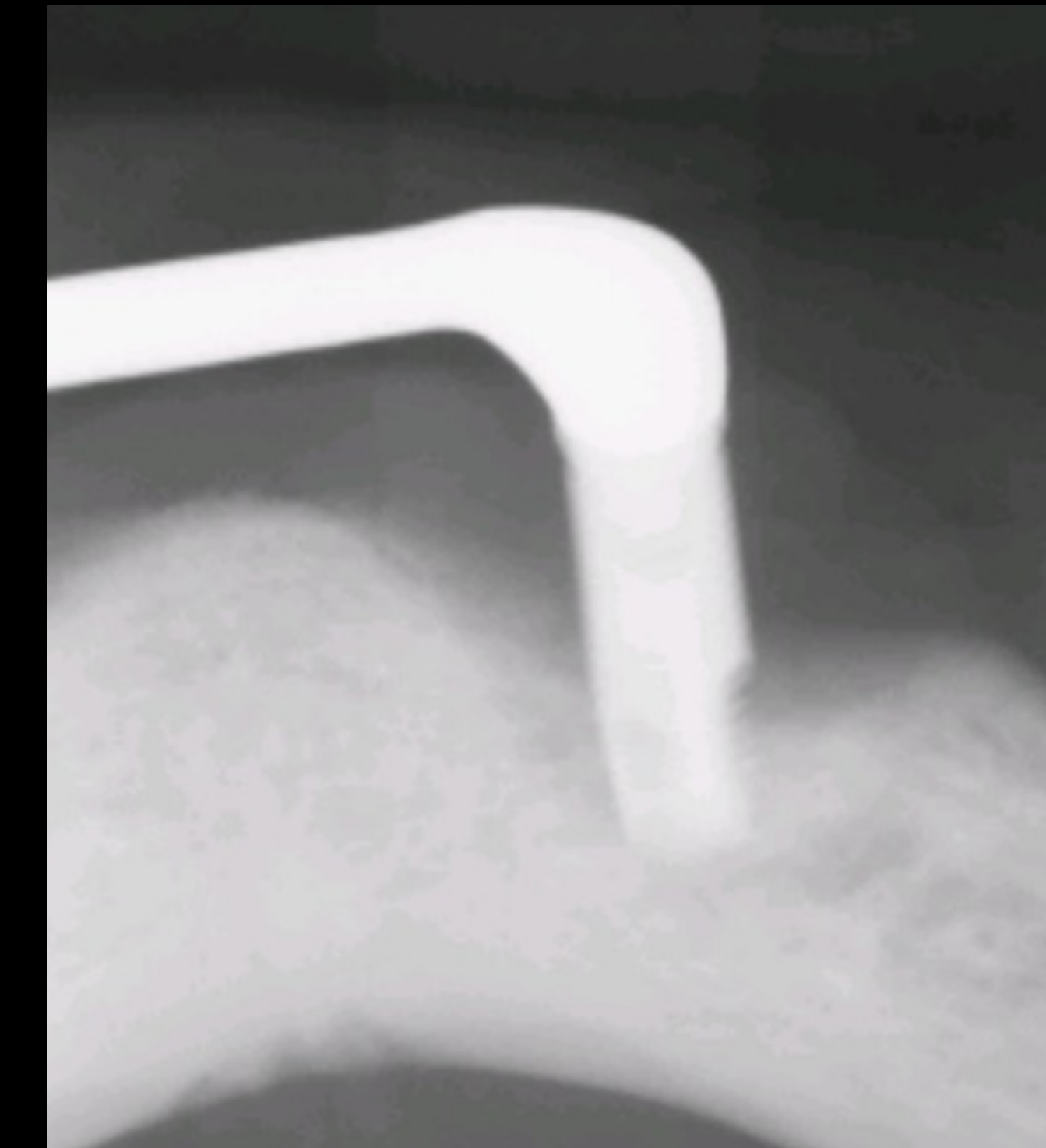
80yo female with maxillary and mandibular removable implant-supported prostheses

Chief complaint of ill-fitting mandibular removable implant-supported overdenture

On examination, severely atrophic maxilla and mandible + failing implants #22 and #27

Implants #22 and #27 subsequently removed

Patient returned, 3 months later, seeking for another implant-supported overdenture



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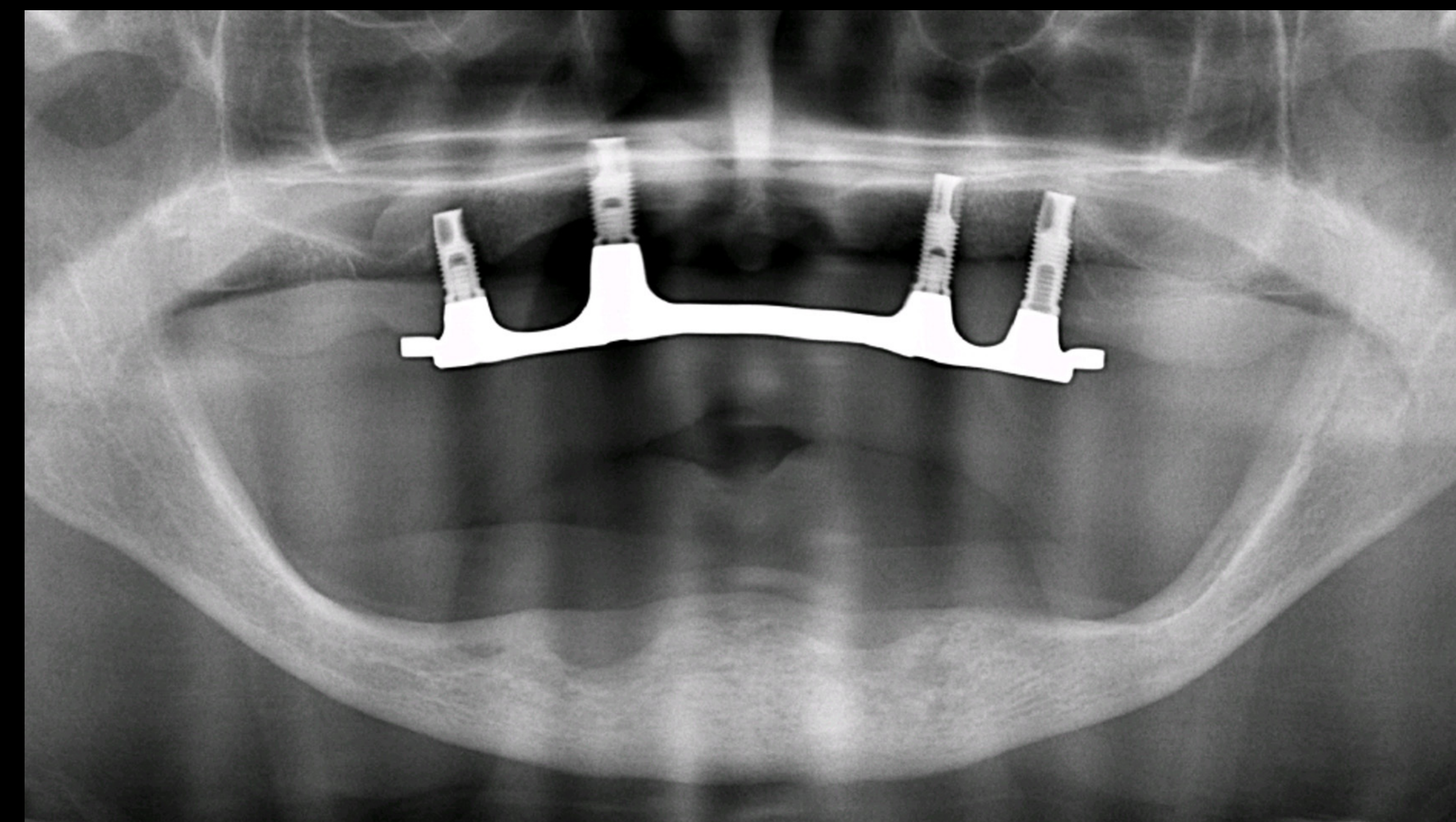
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Clinical case :

Limited bone availability due to **severe mandibular atrophy** and history of **implant failures**

Mental foramina inserted on the alveolar ridges

Lack of attached mucosa and hyperactive but retracted tongue



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Clinical case :

Dual scan technique/Open architecture implant planning software

Creation of a 3D printed hybrid surgical guide

Bone-supported portion anterior to the mental foramina

Mucosa-supported portion in the posterior areas

Superimposed new mandibular denture of the patient



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Conclusion :

This hybrid surgical guide allows for :

- accurate placement and fixation of the surgical guide
- safe and precise implant placement in a severely atrophic mandible
- minimal postoperative risk of paresthesia and discomfort for the patient

