



Placement of quadruple zygomatic implants – a resident’s experience

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INTRODUCTION

Zygomatic implants offer a nongrafting option to restore the atrophic maxilla. Documented success rates approach 100%. The stability of zygomatic implants is achieved as it passes through 3 to 4 cortical layers of bone. The aim of this study is to (i) present a quadruple zygomatic case and (ii) present an overview of zygomatic implants.

METHODS

A 57 year old male presented with chief complaint “I have difficulty chewing”. The Dental Panorex revealed an edentulous maxilla, multiple missing teeth in the mandible, bilateral severely pneumatized maxillary sinuses and minimal anterior maxillary bone. Indications for a quadruple zygoma is 10 mm of height and 4 mm of width in the anterior maxilla. Patient was interested in the “shortest possible treatment time”. Upon CBCT evaluation, the patient’s maxilla was classified was ZAGA type E bilateral. The placement of four zygomatic implants were decided upon.

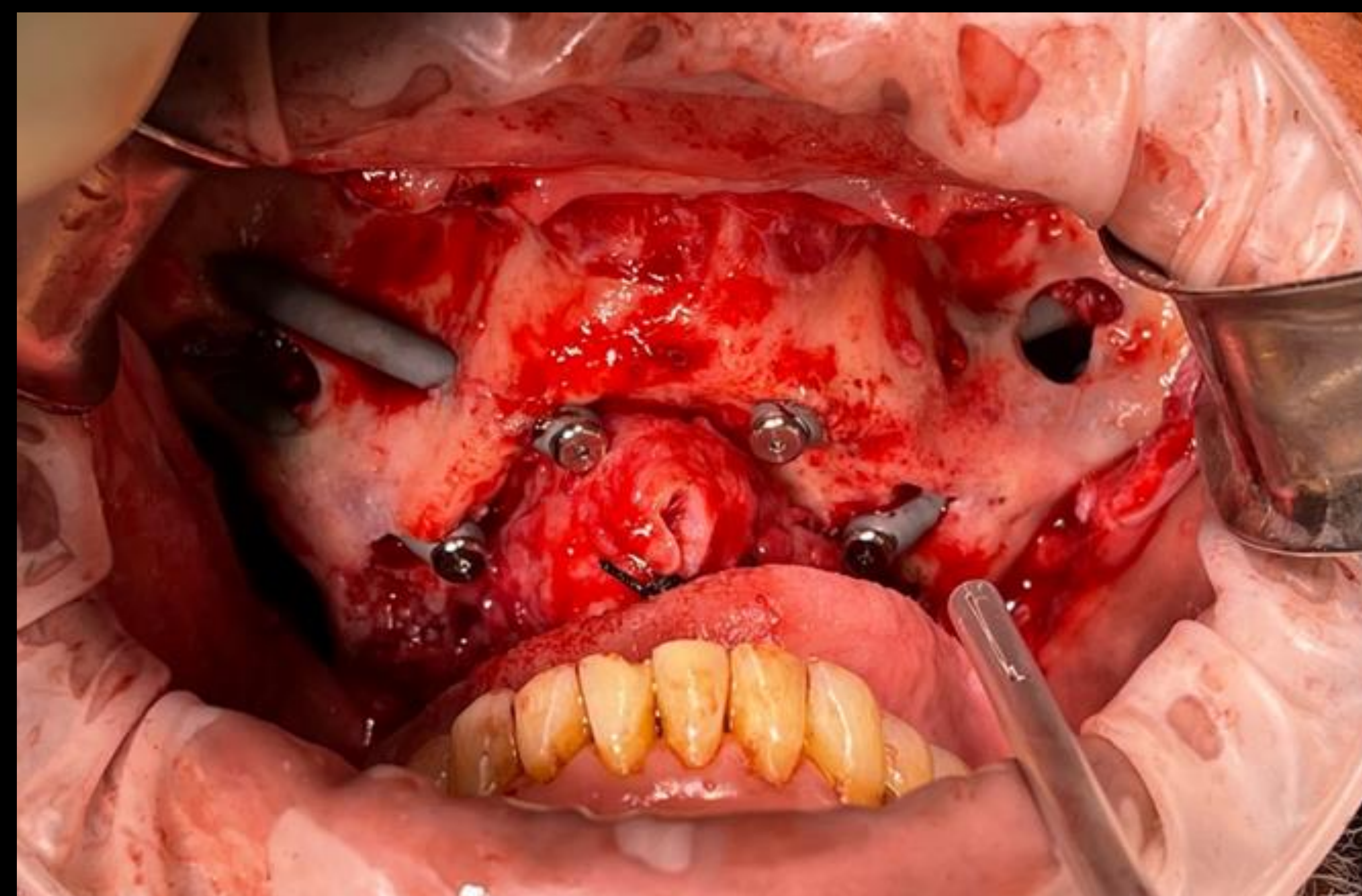
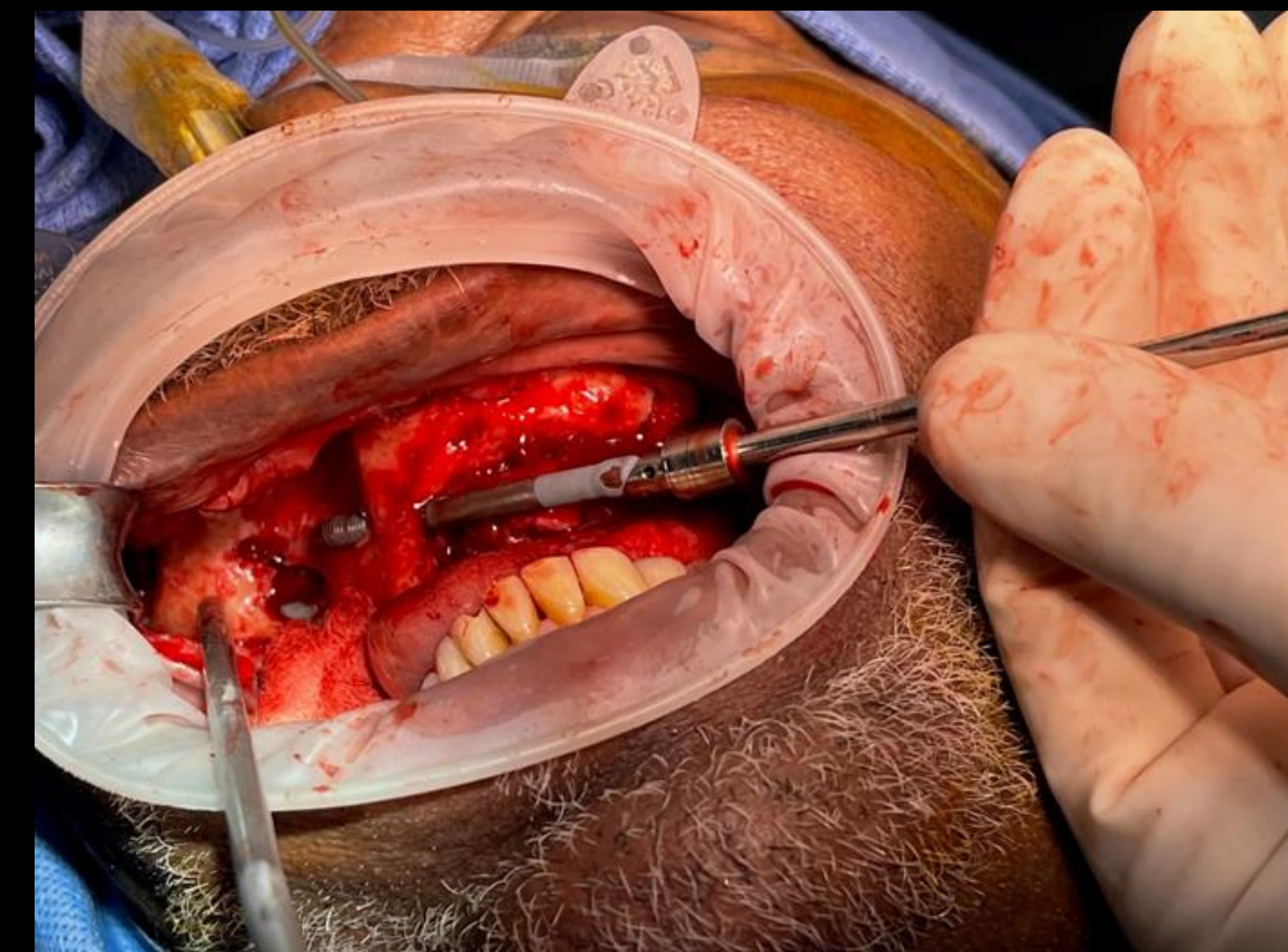
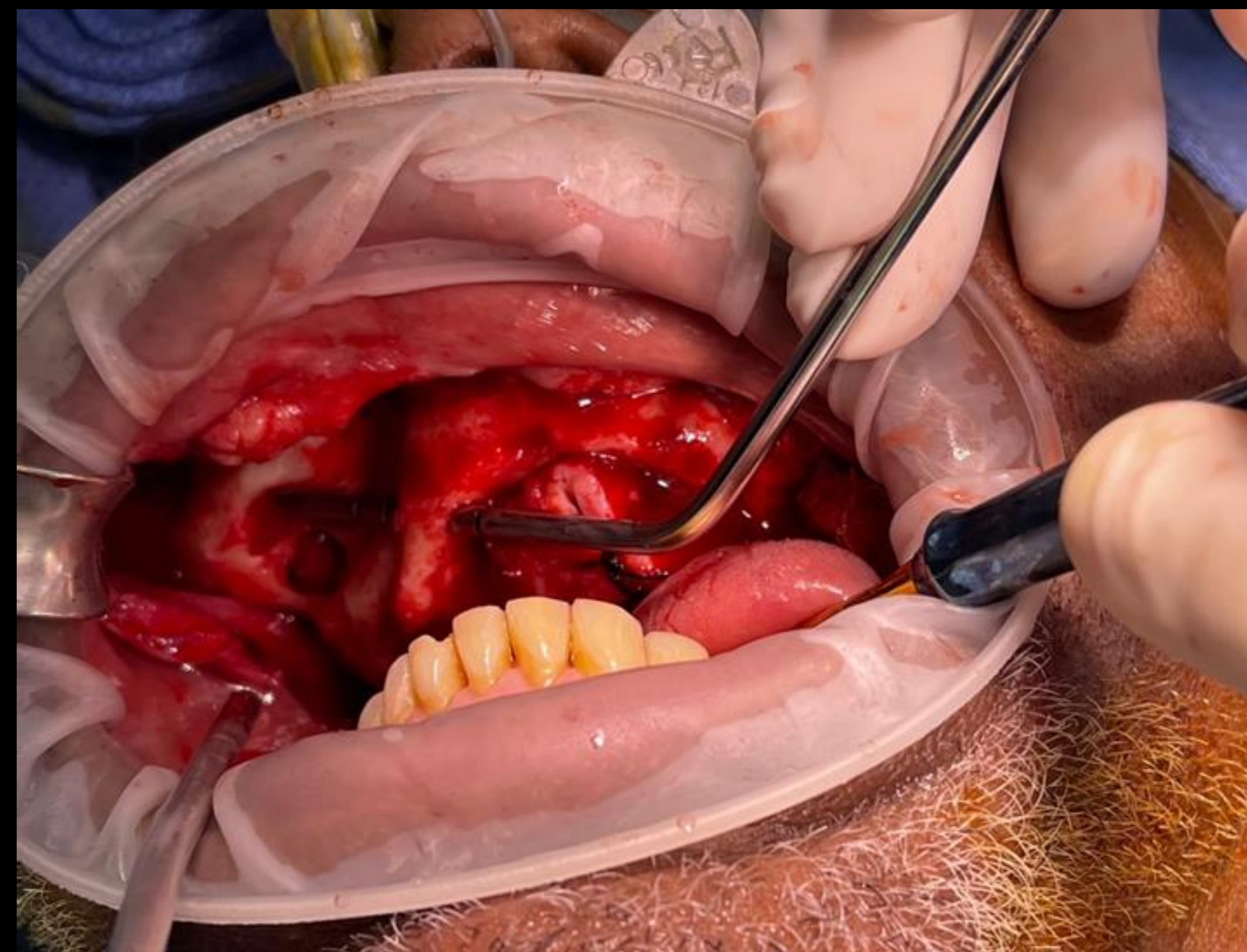
RESULTS

A flap was elevated with crestal incisions slightly towards the palate and a midline release. The incision allowed for adequate access and would allow for fibrous tissue around the implants. The flap was elevated up to the level of zygoma to allow a full view of the anterior wall of the sinus, infraorbital nerve and zygoma. The anterior implants were placed first at the level of the incisors and the posterior implants were subsequently placed at the level of the premolars. A combination of the traditional technique and the ZAGA technique was instituted. On the left, there was perforation of the sinus wall. This was irrigated copiously. This perforation provided direction vision of the roof of the sinus and enabled an optimal point of entrance for the drill into the zygomatic bone.

The posterior zygomatic implants placed on the left was ZAGA type III.

The anterior and posterior zygomatic implants on the right were ZAGA type III. The attending surgeon finds engagement of the zygomatic bone and alveolar crest to result in more stable implants.

CASE PRESENTATION



CONCLUSION

Zygomatic implants can be used as a successful and predictable method for supporting prostheses.

Because of the relative simplicity of zygomatic implant placement compared with the process of bone grafting to restore the severely atrophic maxilla, zygomatic implants are an ideal, stable, and viable option for many patients.

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