



The technique of zygoma implantation for flattening of maxilla anterior wall called ZAGA Type 0~1 .

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INTRODUCTION

Today, zygoma implantation are getting popular from Brånemark introduced its operatives procedure in 1988. The main advantage is that it could avoid highly invasive bone augmentation for severe maxillary atrophy, especially for oncology patients. Aparicio introduced Zygoma Anatomy-Guided Approach (ZAGA) concept in 2011. That procedure can be reduce the complication such as sinusitis, oral-sinus communication and soft tissue recession. But, the implant procedure to ZAGA type 0~1 are should be modified due to still having complications.

OBJECTIVE

Purpose of this case reports was to describe the our modified procedure of zygoma implantation for ZAGA type 0~1 , and discuss its advantages and limitations.

CASES

Three patients who were after oncology surgery patients and normal patient, and a total of five sites were evaluated. One patient had one zygoma implant and two conventional anterior implants. Other two patients had quad zygoma implants. The surgical procedure were performed as follows for all five sites. Maxillary sinus anterior wall bone are removed temporarily as shaped a square. Then sinus membrane was elevated toward the medial aspect of the maxillary antrum adequately and zygoma implants were inserted. After that maxillary sinus anterior wall bone which was removed temporarily was replanted. The final prothesis were delivered to all patients 6 months post surgery.

RESULTS

There are no complications during surgery and also after surgery. Radiographic observation after 2 year surgery, there are no sinusitis and found the radiolucent area on the buccal side of zygoma implants.

CONCLUSIONS

Our technique of zygoma implantation is very useful for flattening of maxilla anterior wall called ZAGA Type 0~1 .

References

- 1) Brånemark P-I. The zygomatic fixture: clinical procedures. Kloten: Nobel Biocare AB; 1998.
- 2) Aparicio C, editor. Zygomatic implants: the anatomy-guided approach. 1st edition. United Kingdom: Quintessence Pub Co; 2012.

CASE A



Fig1A : Preoperative view

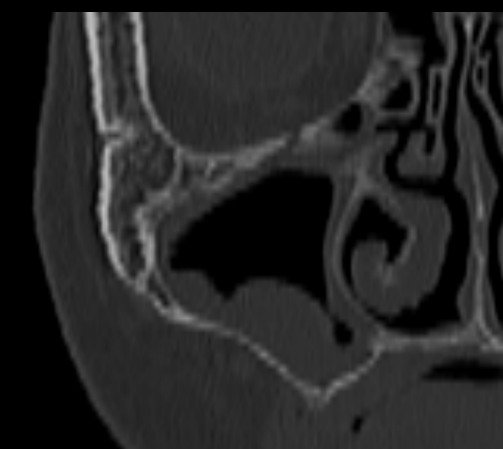


Fig2A : Preoperative coronal CT, showing ZAGA Type 0

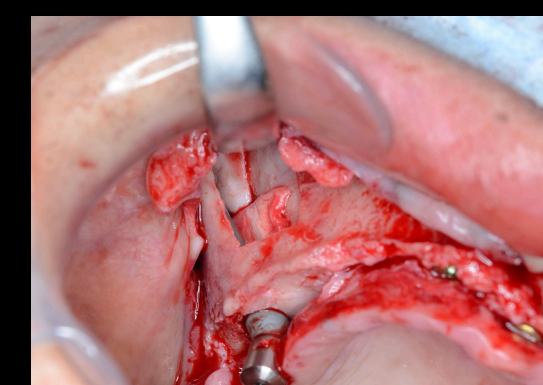


Fig3A : After insertion of one zygomatic implant

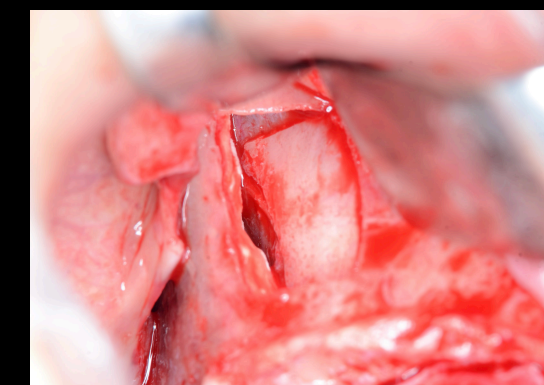


Fig4A : Replanted sinus anterior wall bone



Fig5A : One zygomatic implant and two conventional implants provided

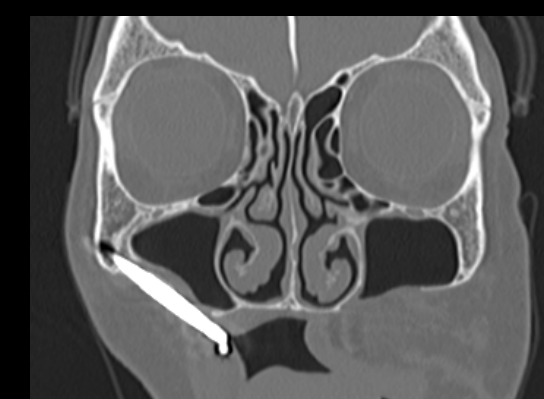


Fig6A : Preoperative coronal CT, showing no sinusitis

CASE B



Fig1B : Pre-operative view

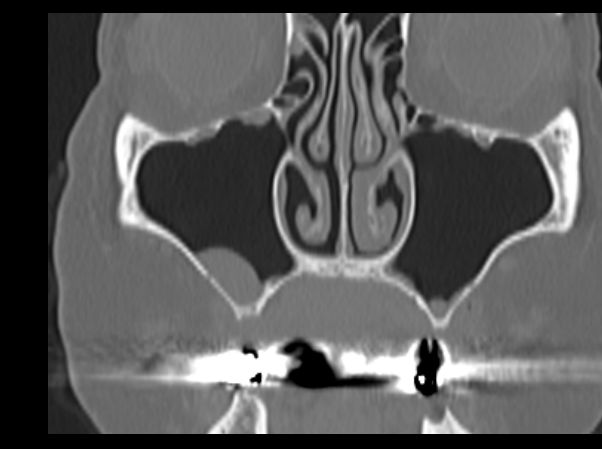


Fig2B : Preoperative coronal CT, showing ZAGA Type 1

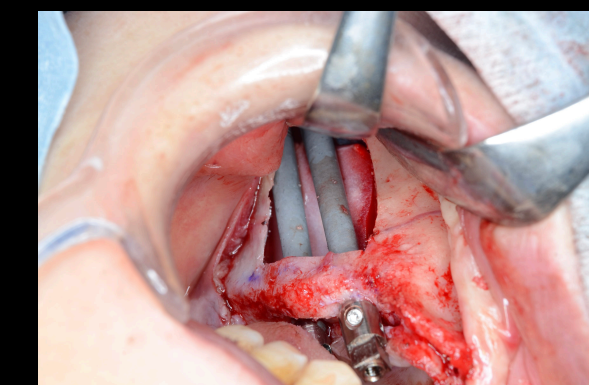


Fig3B : After insertion of two zygomatic implant at right site

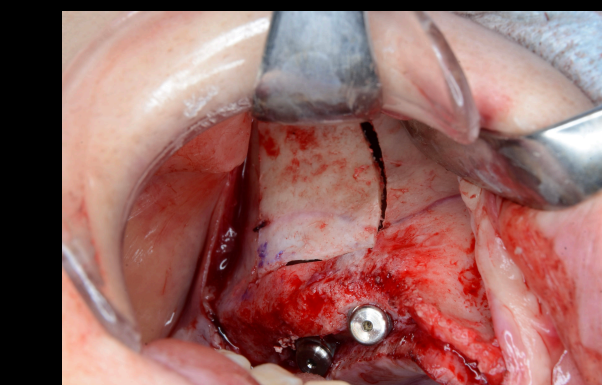


Fig4B : Replanted sinus anterior wall bone



Fig5B : Four zygomatic implants provided

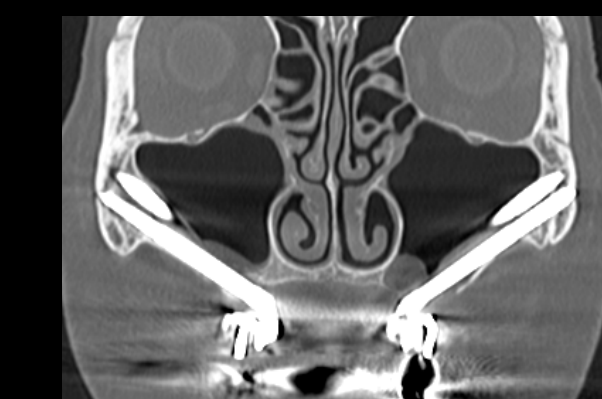


Fig6B : Preoperative coronal CT, showing no sinusitis