Implantize Compact Surgical Protocol

RG.PR.23.01 Versão: 5.0 Approval: 12-09-2023

X-ray Protocol

Before placing an Implantize Compact, the X-ray protocol should be followed for better implant design.

Maxilla

FOV (Field of View)

1

As Marked in blue, should contain the mid plane of the face (half of the orbits to the occlusal plan, ear to ear

RESOLUTION

2

Should be set to slices of 250 microns (0,25mm) up to
400 microns(0,4mm). If there ar any many metal parts (i.e. implants/abutments/crowns) in the mouth,
prefer te lower resolution: 400 microns

DENTURE

3

If a patient already has a denture, create a few radio-opaque gutta percha/composite points, spread along the span on the palatal side. Make sure the points are showing about 0.2mm above the surface. Preform a CT scan of the patient first with the denture in perfect occlusion.

SENDING

4

The file should be sent to info@boneeasy.com mentioning the following information:

1. Countryof surgery
2. Dentist and Patient details
3. Expected day for the surgery

X-ray Protocol

Before placing an Implantize Compact, the X-ray protocol should be followed for better implant design.

Mandible

FOV (Field of View) 1

As Marked in blue, should contain the mid plane of the face (half of the orbits to the occlusal plan, ear to ear

RESOLUTION 2

Should be set to slices of 250 microns (0,25mm) up to
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prefer te lower resolution: 400 microns

DENTURE 3

If a patient already has a denture, create a few radio-opaque gutta percha/composite points, spread along the span on the lingual side. Make sure the points are showing about 0.2mm above the surface. Preform a CT scan of the patient first with the denture in perfect occlusion.

SENDING 4

The file should be sent to info@boneeasy.com mentioning the following information:

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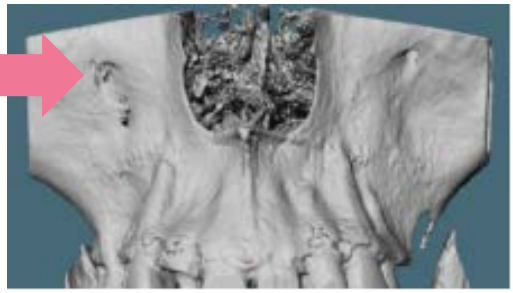
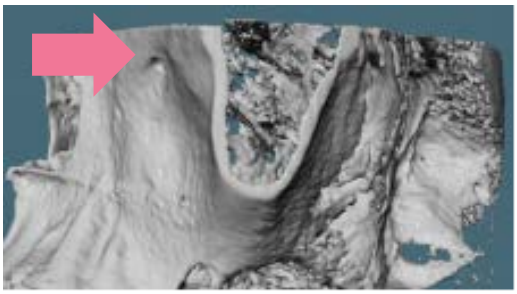
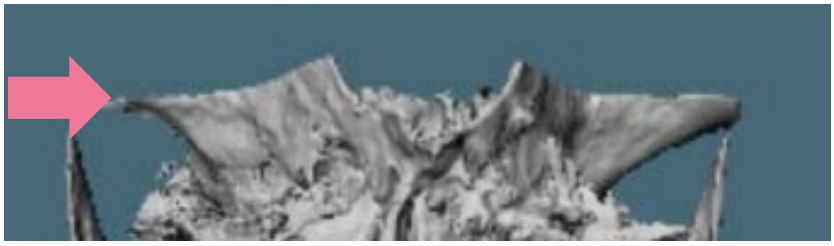
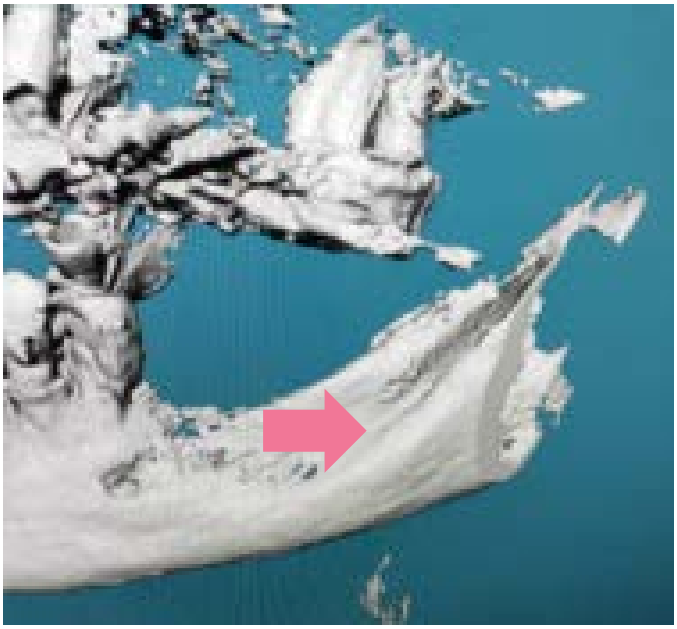
CT/CBCT errors

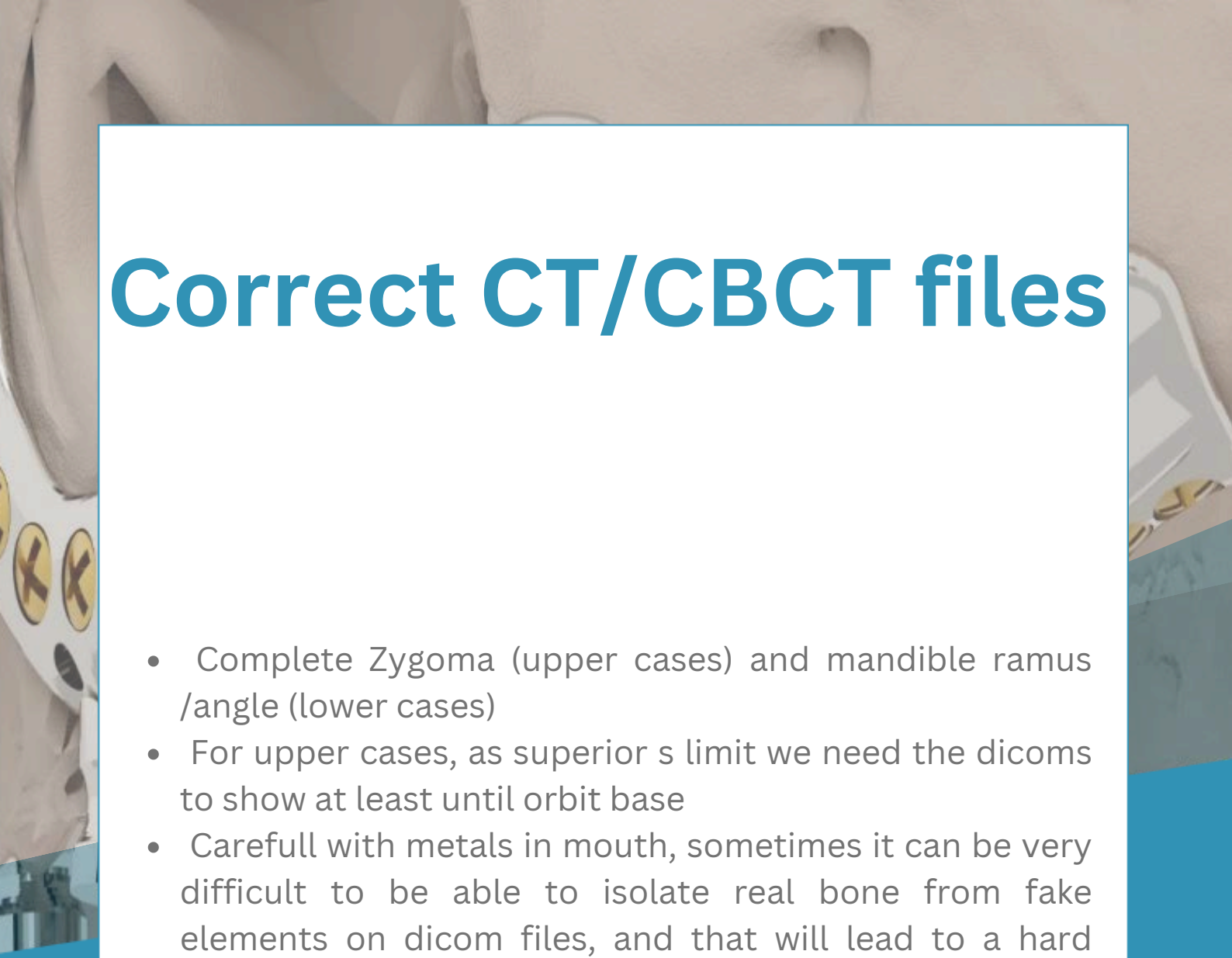
Non suitable for use











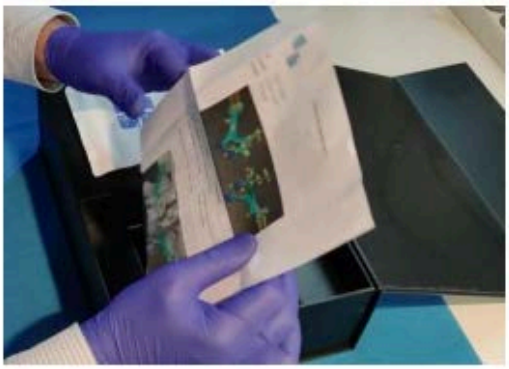
Correct CT/CBCT files

- Complete Zygoma (upper cases) and mandible ramus /angle (lower cases)
- For upper cases, as superior s limit we need the dicoms to show at least until orbit base
- Carefull with metals in mouth, sometimes it can be very difficult to be able to isolate real bone from fake elements on dicom files, and that will lead to a hard fitting of the implant.

Packaging

Implantize Compact packaging is composed by the following items:

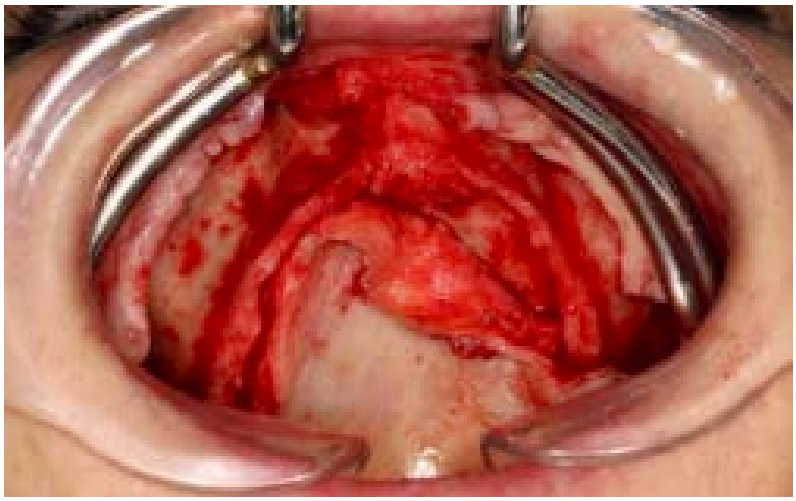
- Implantize Compact Blister
  - Implantize Compact;
  - Surgical guide;
  - Fixation screws;
- Printed bone biomodel (mimetizing the needed osteotomy);
- Technical file;



Incision

Maxilla

Supra crestal horse shoe incision design with two relief incisions for zygoma access.

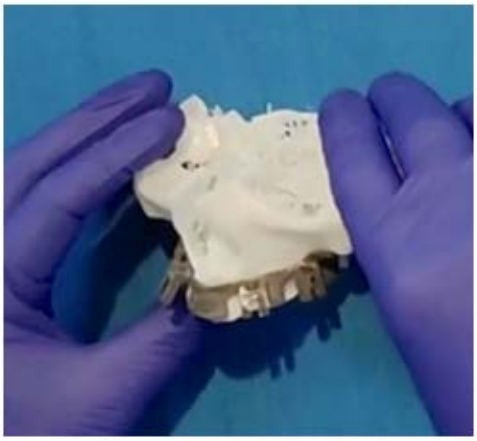


Mandible

Supra crestal incision with relief towards anterior border of the ramus with exposure of the dental nerve

Placing the surgical guide

Place the guide on the buccal bone and search the place where it get stable.



Use 2.0 drill to drill through the holes.

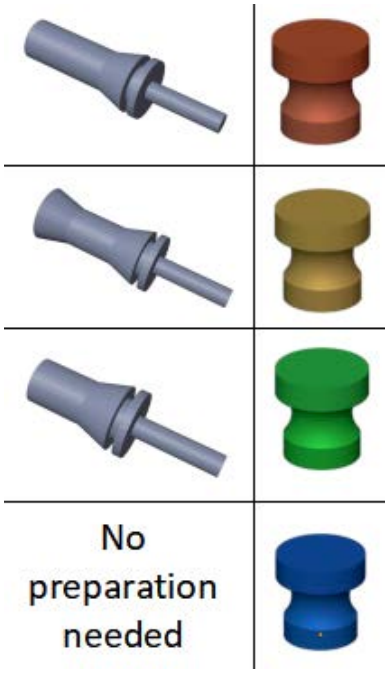
Placing the surgical guide

Place the 3 pins existing in the kit.

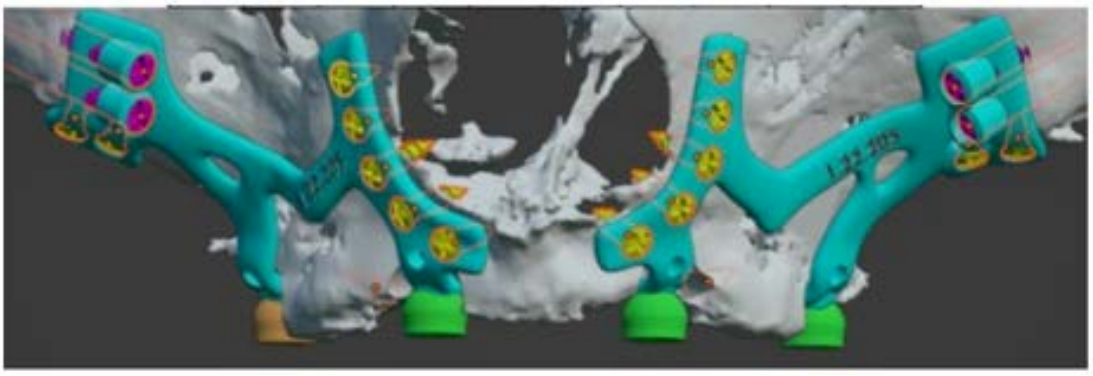
Driling

There are 3 osteotomy burs that should be used according to the technical file.

Technical file color system for the bur selection: Each color corresponds to a different type of bur design.



The implant design, on the technical file, displays one color for each connection. To inform the bur to be selected for that location.



Osteotomy should be done using **5000rpm** or more, depending on bone hardness program, using a contre-angle relation 1:1.
It is very important to use irrigation, during osteotomy, to avoid bone over heating.
If the crest is too thin and high, the bur active area cannot touch the right bone area, accordingly with previous planning.

In these cases, it is necessary to do some initial osteotomy, to reduce the crest height, until the active area of the bur can touch the crest, and the chamfer to touch the vestibular face of the bone.
To do that, bur can be used in an opposite position (left) or with a standard round bone bur.

After the osteotomy, remove the surgical guide pins and guide.

Implant Placement

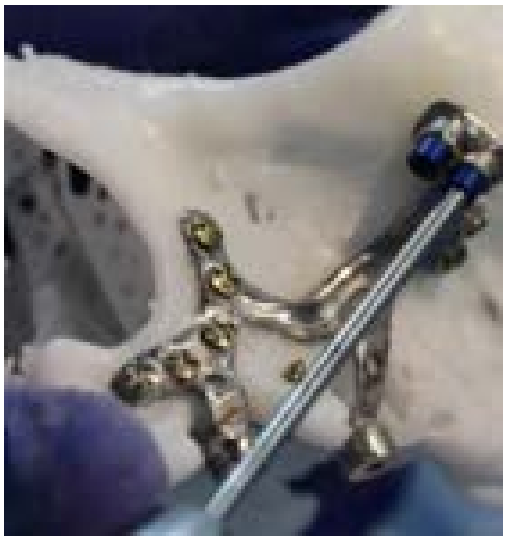
After removing the guide, implant should be unscrewed from the box, with drive 1.2 hex + wrench adaptor (photo) and make a passivity try in. If some interference exists that doesn't allow good fitting of the implant, bone should be trimmed in this area until a good fitting be achieved.

Maxilla

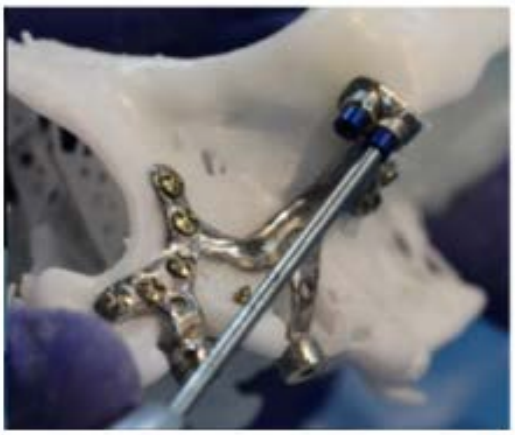
After passive seating we need to place fixation screws, starting by the 2.0 screws on pyramidal apophysis, then the pyriform apophysis and finally the palate screw. All of these screws are self perforating, so it doesn't need to be drilled.

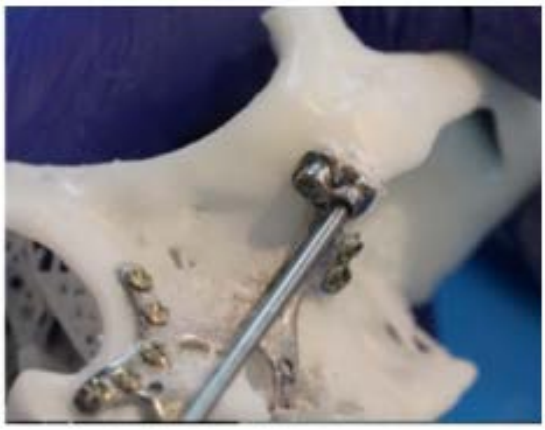
Maxilla

The 2.0 long drill, should be used on a straight handpiece to make the bone preparation through the blue guides screwed on the zygoma screw hole, always using irrigation.



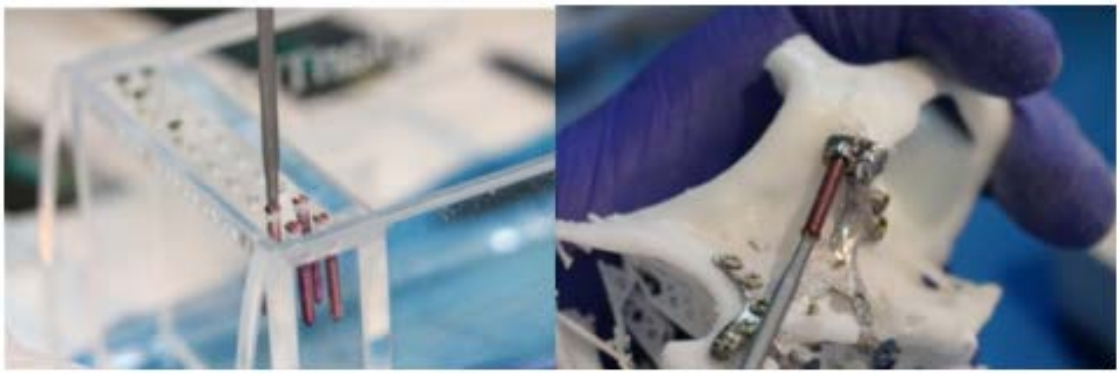
Remove the guide and test the 2.7mm screw, if the torque is too high, remove the screw and use drill again till the end without the blue guide, if the torque is still high, pass the 2.4mm drill once.





Maxilla

Screw the 2.7mm screws till they engage on the threads of the plate (screw lock system).



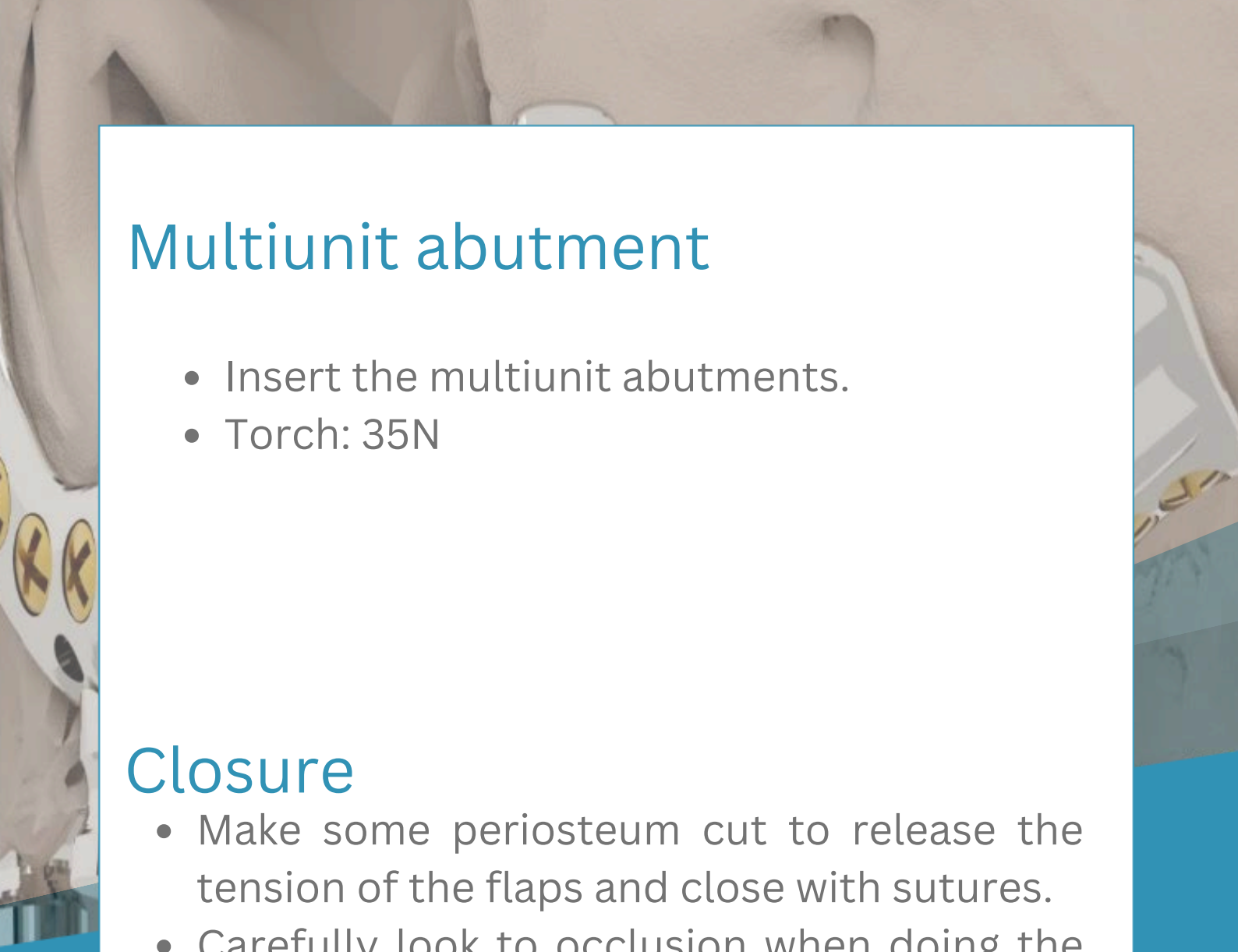
During zygoma fixation, please confirm if the implant does not move ways from its correct position.

Mandible

- After passive seating we start with the screws from the retromolar area, in the number of 3;
- Then the 3 screws of the mentalis area; After the 2 screws from the ramus;
- And finally the buccal and the lingual screw in the middle of the implant.

Note: although this is self perforating screws, due to the corticalization of the mandible, a 1.3 drill may need to be used to drill the bone through the hole on the plate. In this case do not insert the total length of the drill.
Insert the screw manually.



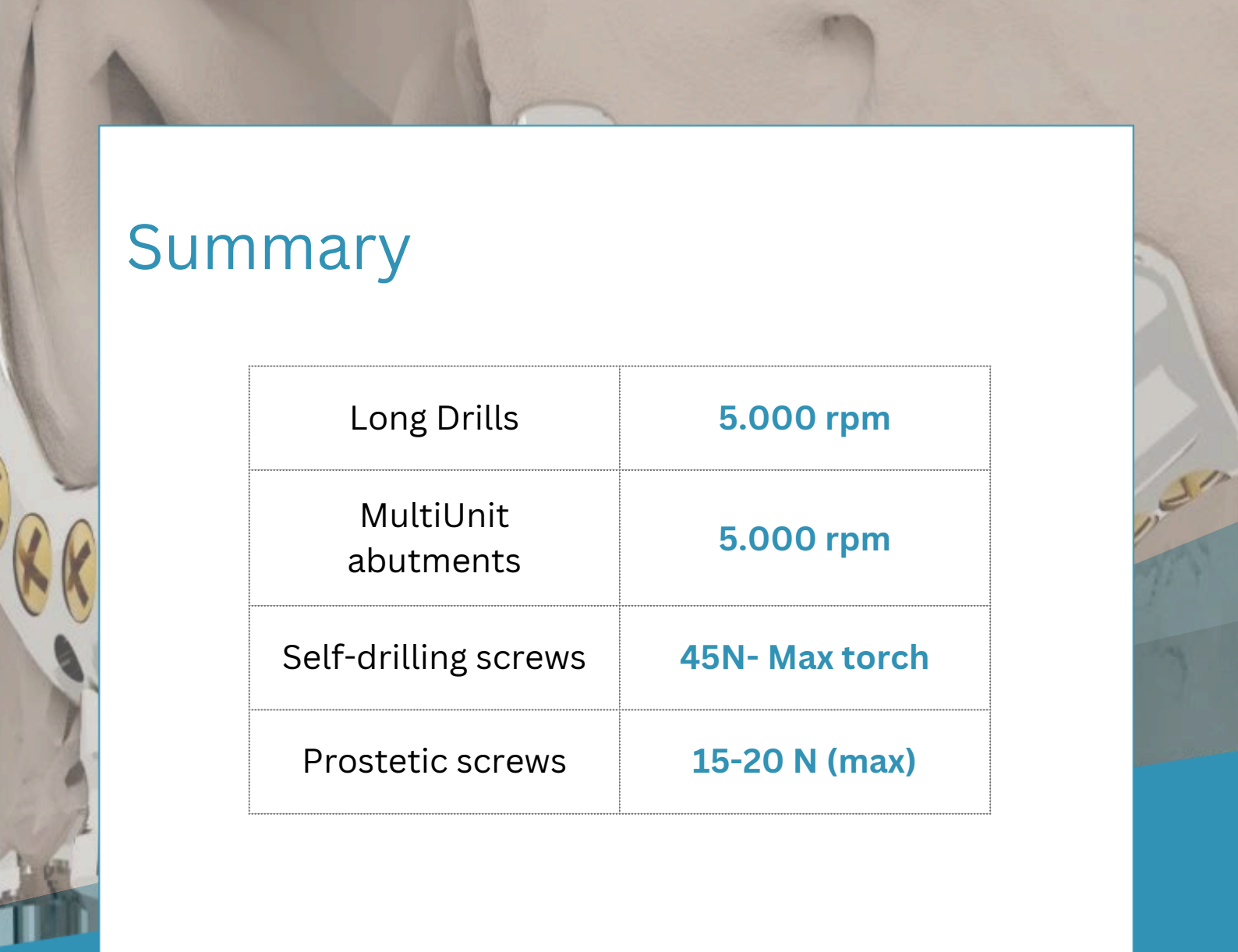


Multiunit abutment

- Insert the multiunit abutments.
- Torch: 35N

Closure

- Make some periosteum cut to release the tension of the flaps and close with sutures.
- Carefully look to occlusion when doing the prosthesis loading.



Summary

Long Drills	**5.000 rpm**
MultiUnit abutments	**5.000 rpm**
Self-drilling screws	**45N- Max torch**
Prostetic screws	**15-20 N (max)**

Thank you

Do not print this page		
Version	**Date**	**Modifications**
V.01	2021	Creation of the document
V.02	1/2023	General Review of the document
V.03	10/2023	Add the new burs
V.04	25/01/2024	Add new burs and connections; add information about the torch and proportion
V.05	04/07/2024	Add new table with summarized information