

Aesthetic Location of the Occlusal Plane in an Asymmetric Face: A Case Report.

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Background

Occlusal plane position is the primary link between function and esthetics. Correlating occlusal plane deficiency to facial imbalance is the key to the use of facial analysis in treatment planning. Ideal occlusal plane position is related to anatomic and skeletal requirements. There are considerations to determinate an aesthetic rehabilitation according to the facial asymmetry. The golden ratios and dental aesthetics are related. It is important to seek a personalized aesthetic in each case to achieve the best results.

Clinical Case

A 45-year-old female patient with terminal dentition and horizontal bone loss. Facial analysis showed facial asymmetry, a sharp bipupillary plane edged of 3°, and ears with insertion at different heights. The patient has a gummy smile, which may be a subjective fact because the clinical crowns don't correspond to the average measurements of the upper anterior teeth.

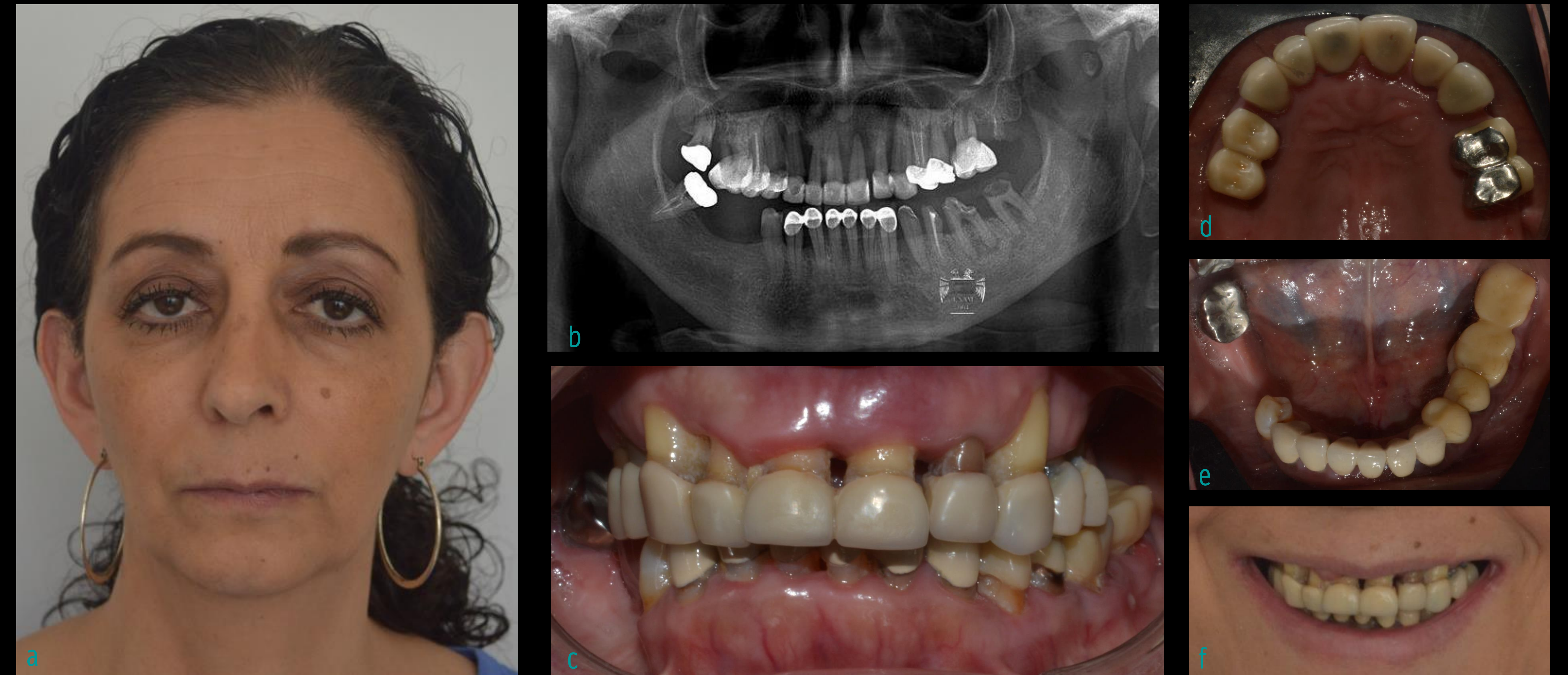


FIGURE 1. Clinical Situation (a), frontal facial photograph (b), orthopantomography (c), frontal intraoral photograph (d), upper occlusal intraoral photograph (e), lower occlusal intraoral photograph (f), extraoral smile photograph.

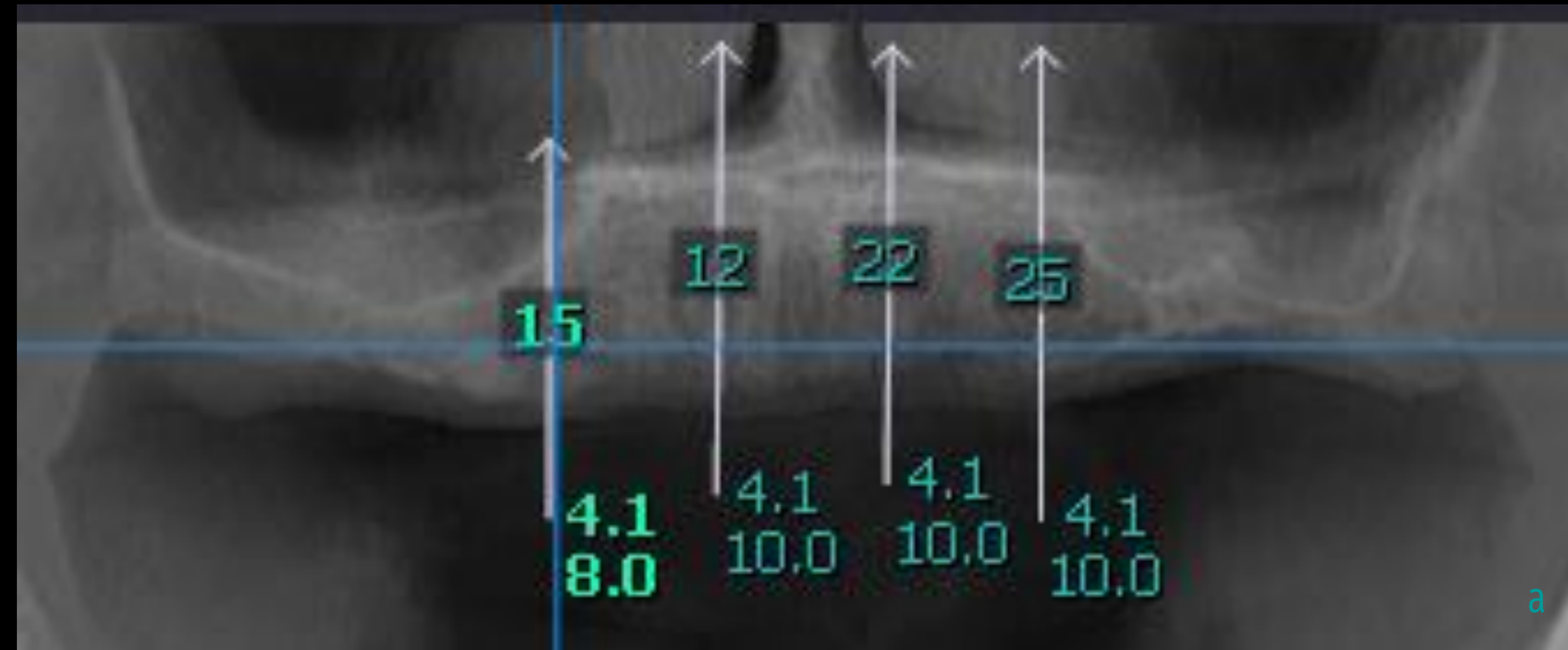
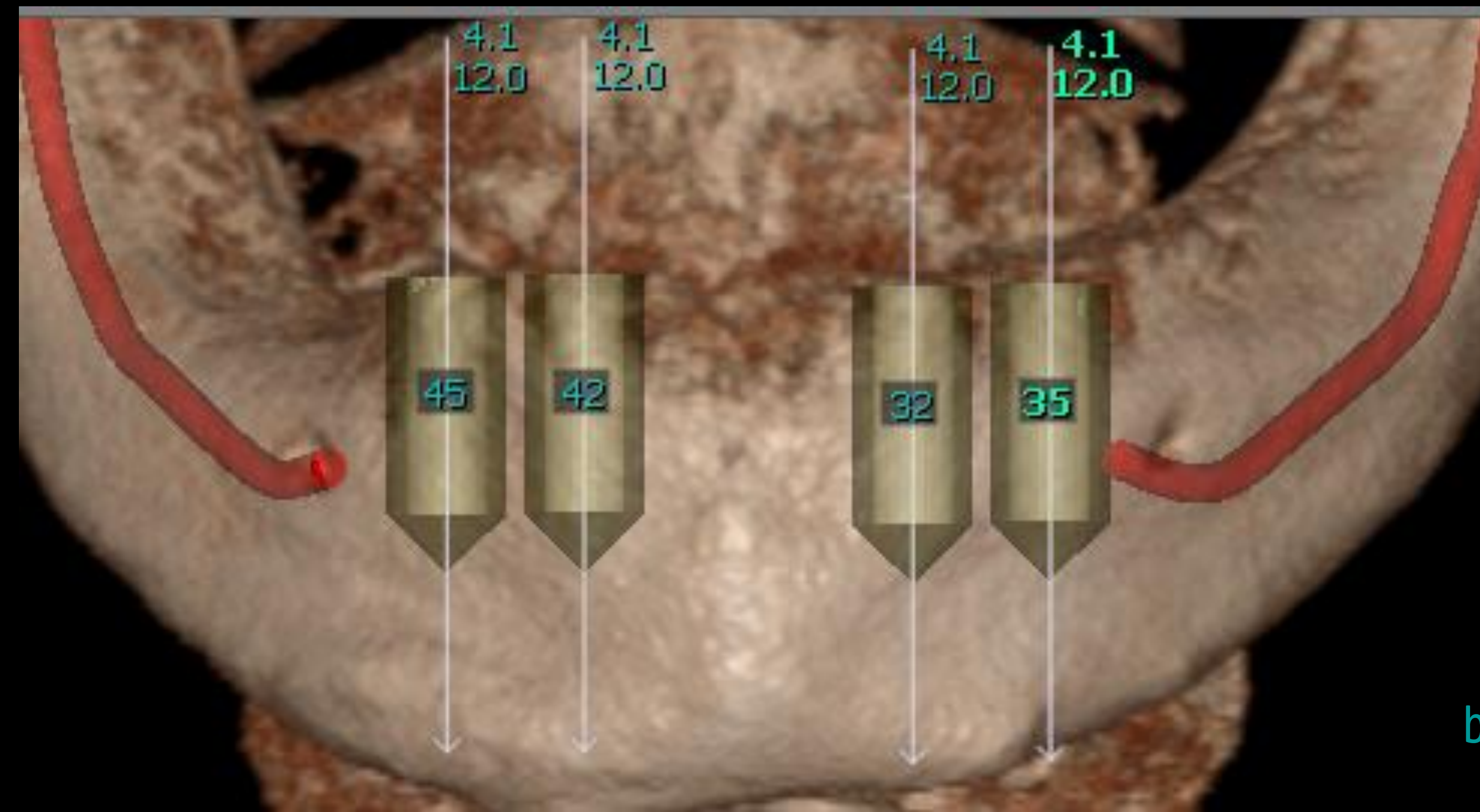


FIGURE 2. Tomographic Views (a), planning of 4 implants in the upper arch (b), planning of 4 implants in the lower arch .

- REHABILITATE THE FUNCTION OF COMPLETE ARCHES
- A 45-YEAR-OLD FEMALE PATIENT, WITH TERMINAL DENTITION
- FACIAL ASYMMETRY: BIPUPILLARY PLANE EDGED OF 3°
- NOSE TO THE RIGHT OF THE FACIAL MIDLINE
- DIFFERENT HIGHT EARS INSETION
- SUBJECTIVE GINGIVAL SMILE

After 8 months of the dental extractions & allograft, a tomographic- prosthetic planning, with a multifunctional device, 4 implants were placed per arch, ITI protocol placement was used. It was rehabilitated by means of implant-supported fixed prosthesis, metal / acrylic

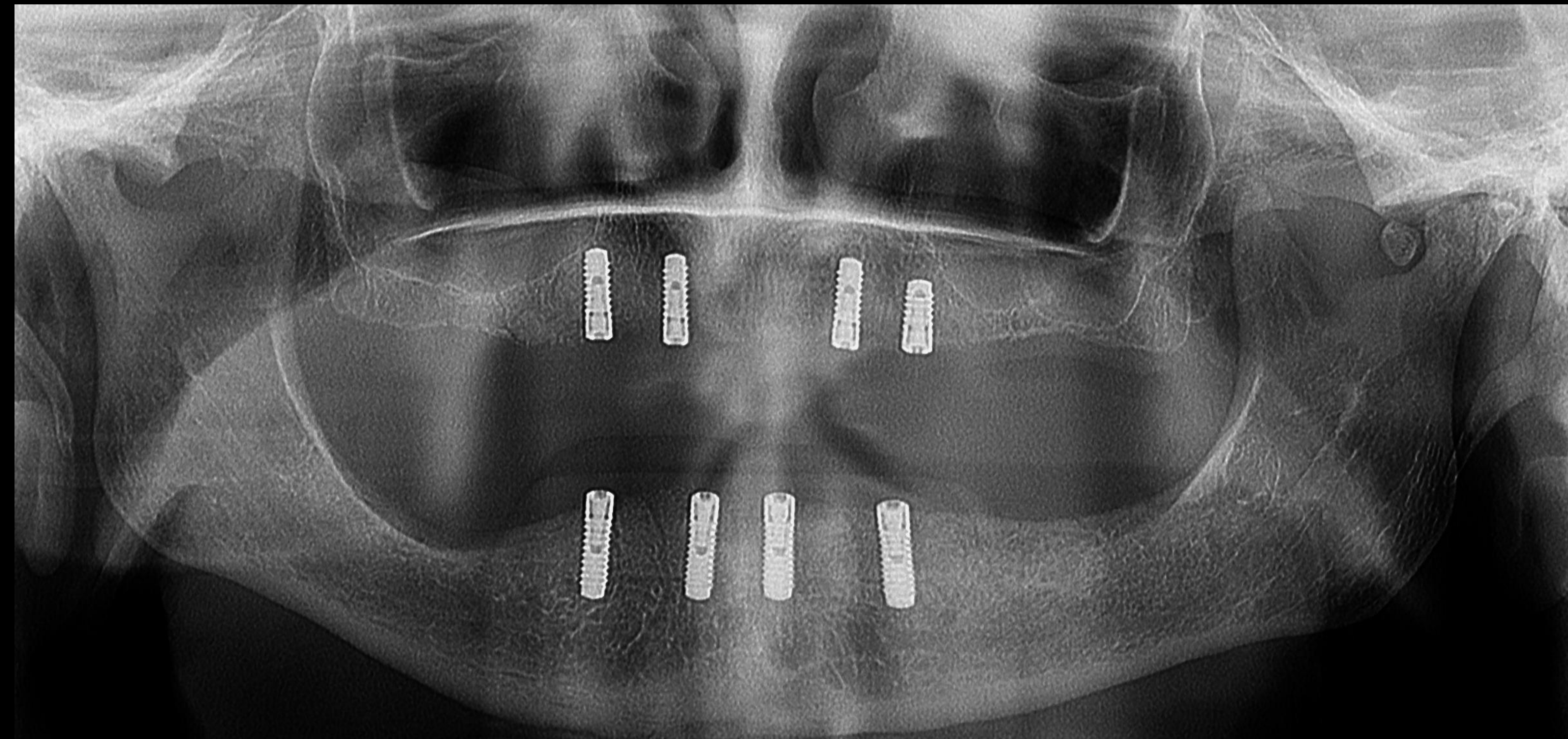


FIGURE 4. Post surgical orthopantomography, 8 implants were placed.



FIGURE 3. BL Straumann Implant.





The **occlusal plane** is oriented, **NOT** according to the **bipupillary line**, neither with **Camper Line**, but with **horizon line**, based on a **spirit level**, from the front & profile. The facial midline & the dental midline coincide, except for the tip of the **nose to the right**

FIGURE 5. Facial Analysis.

Mounting on the semi- adjustable **articulator** the orientation of the **occlusal plane** is checked on both the **wax** & **the tooth** mounting plate. The **selection** of acrylic teeth was based on the **inter- alar nasal space** available & the shape of the **natural teeth** & **balanced bilateral** as occlusal scheme.

Slow
articulation
SOFT
Ivoclar

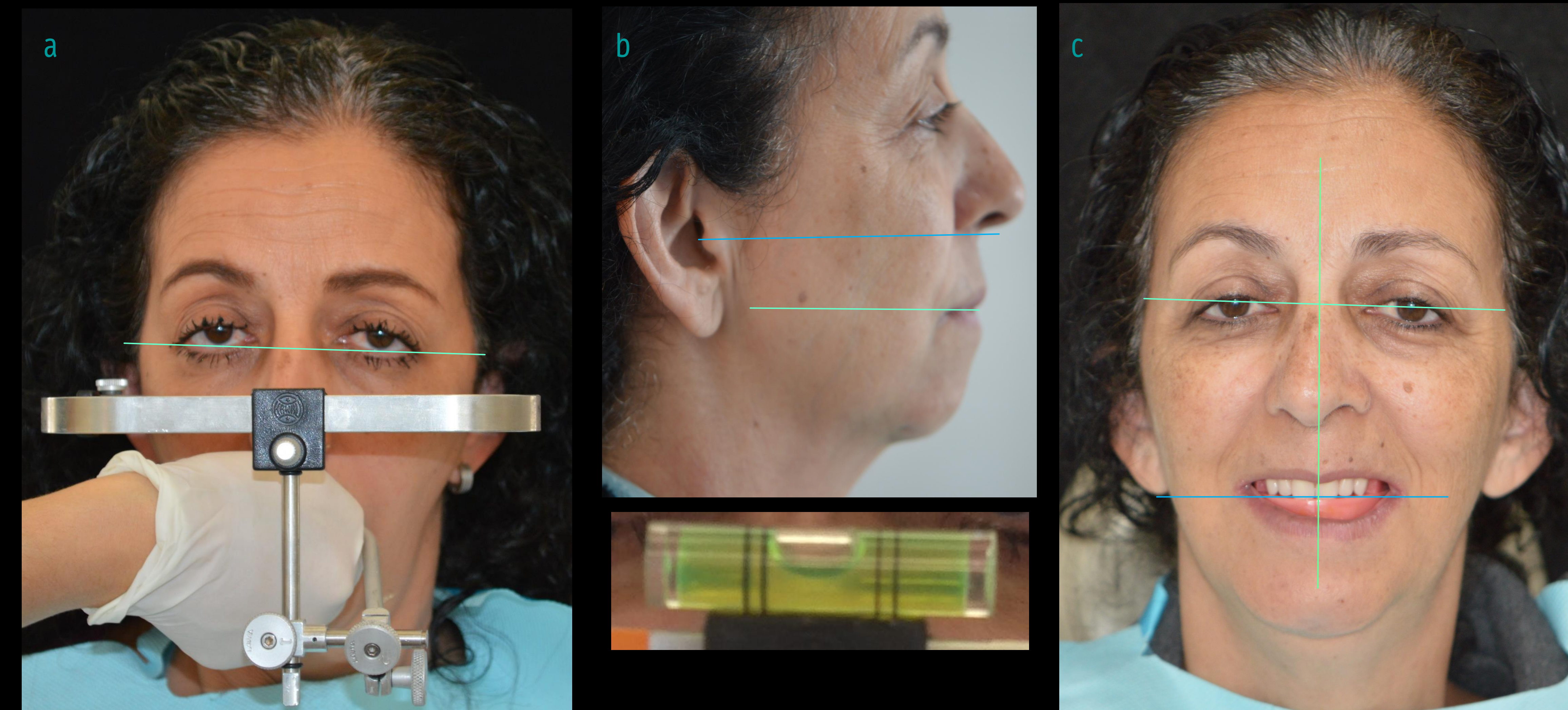


FIGURE 6. Orientation occlusal rim transfer base (a), orientation of the facial arc according to the level (b), orientation of the occlusal plane with the frankfort line (c), facial orientation of the occlusal rim transfer base.

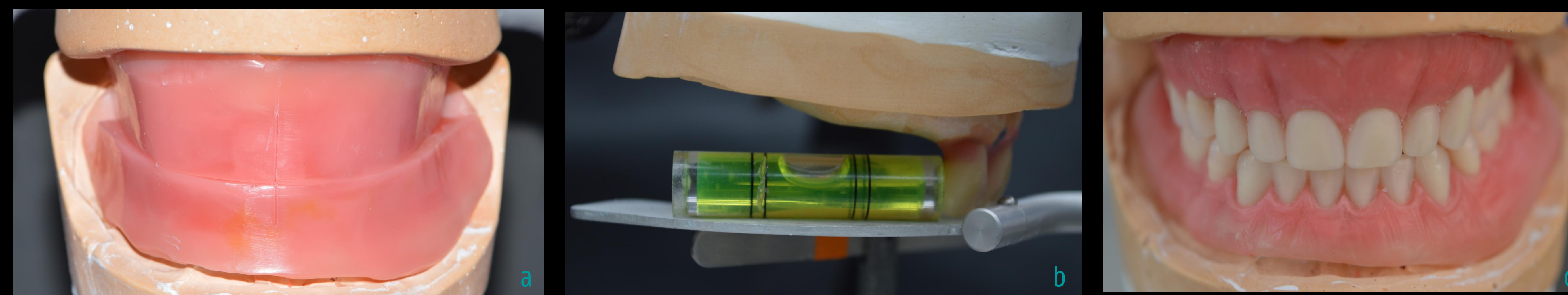


FIGURE 7. (a), occlusal rim transfer bases articulated (b), level orientation fork (c), teeth arrangement.



RESULTS.

An implant-supported prosthesis with 4 superior & inferior, functional implants, however, aesthetically, it presented a total exposure of the teeth and 3mm of acrylic gum, without being able to show the residual prosthesis- flange interface line.

CONCLUSIONS.

Orienting the occlusal plane is not always possible according to the facial characteristics due to soft tissue asymmetries, it is then that we must orient the position of the occlusal plane harmoniously to achieve an aesthetic and functional result.



FIGURE 7. Final Clinical Results (a), extraoral photography, smile evaluation and harmony of implant-supported rehabilitation (b), Comparison of the profile with and without prosthesis (c), clinical situation intraoral front, (d) right and (e) left lateral, (f) upper and (g)n lower occlusal, Upper and lower implant-supported prosthesis in (h) basal view and (i) occlusal view.

REFERENCES

