

BACKGROUND

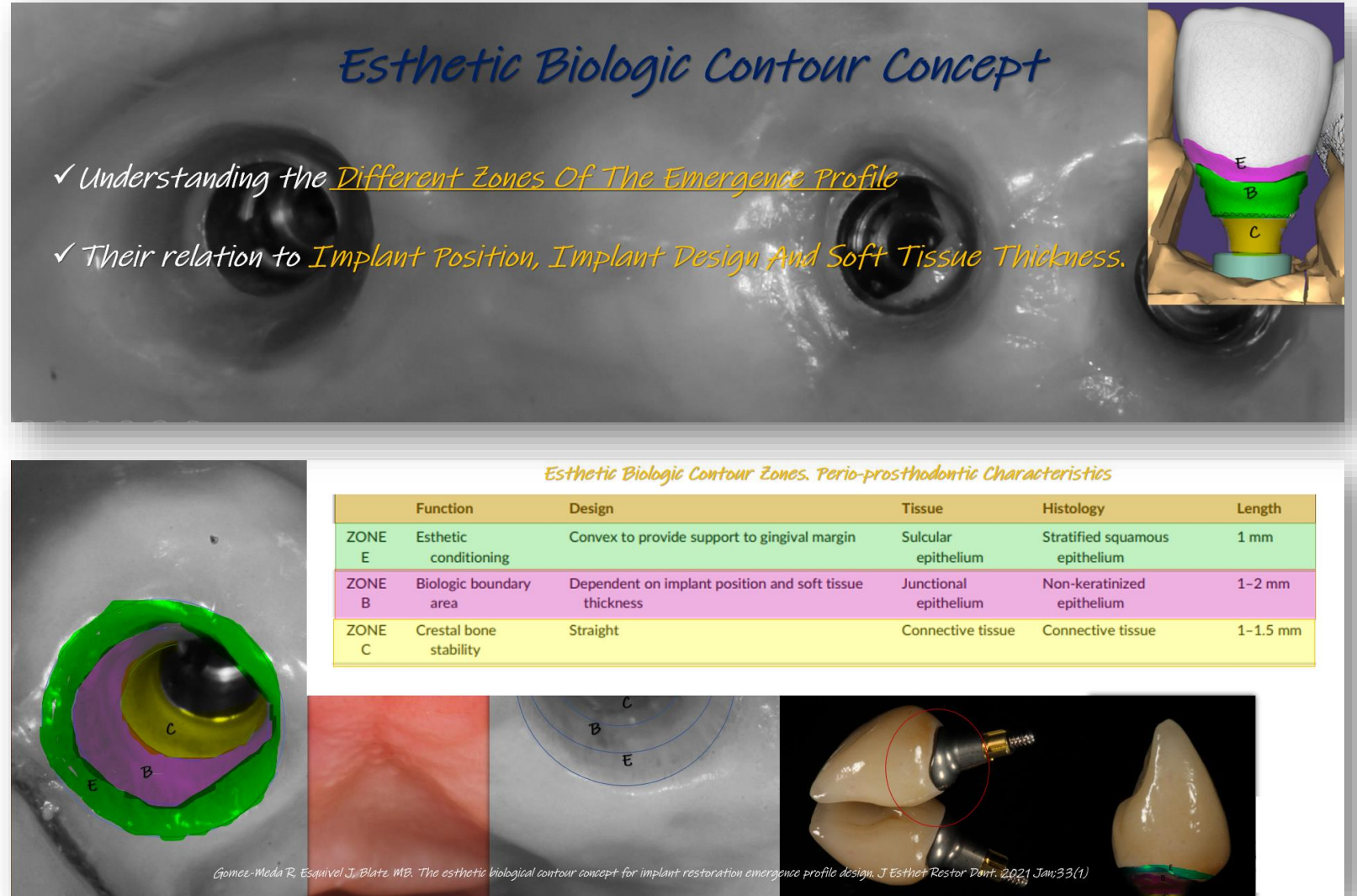
The development of emergence profiles for dental implants in the esthetic zone is a nuanced process that requires a deep understanding of various zones and their specific design needs.

Proper emergence profile design supports esthetic outcomes and provides favorable biological response to implant-supported restorations.

This poster presents evidence-based biological, technical & clinical considerations & insights into abutment selection & prosthetic design to create implant-supported restorations that are functional, aesthetically pleasing and biologically sound in the long term.

Esthetic Biologic Contour Concept

- ✓ Understanding the Different Zones Of The Emergence Profile
- ✓ Their relation to Implant Position, Implant Design and Soft Tissue Thickness.



Function	Design	Tissue	Histology	Length
Esthetic conditioning	Convex to provide support to gingival margin	Sulcular epithelium	Stratified squamous epithelium	1 mm
Biologic boundary area	Dependent on implant position and soft tissue thickness	Junctional epithelium	Non-keratinized epithelium	1-2 mm
Crestal bone stability	Straight	Connective tissue	Connective tissue	1-1.5 mm

(Source: Made R, Eisenberg J, Jambhekar SS. The esthetic biologic contour concept for implant restoration emergence profile design. J Esthet Restor Dent. 2022;34(3):1)

Abutment selection: Slightly Labial

IMPLANT LOCATION: Slightly Labial

ABUTMENT EMERGENCE PROFILE: Concave

RATIONALE: Increase ST Thickness

Recommended Prosthetic Design: Cement Retained

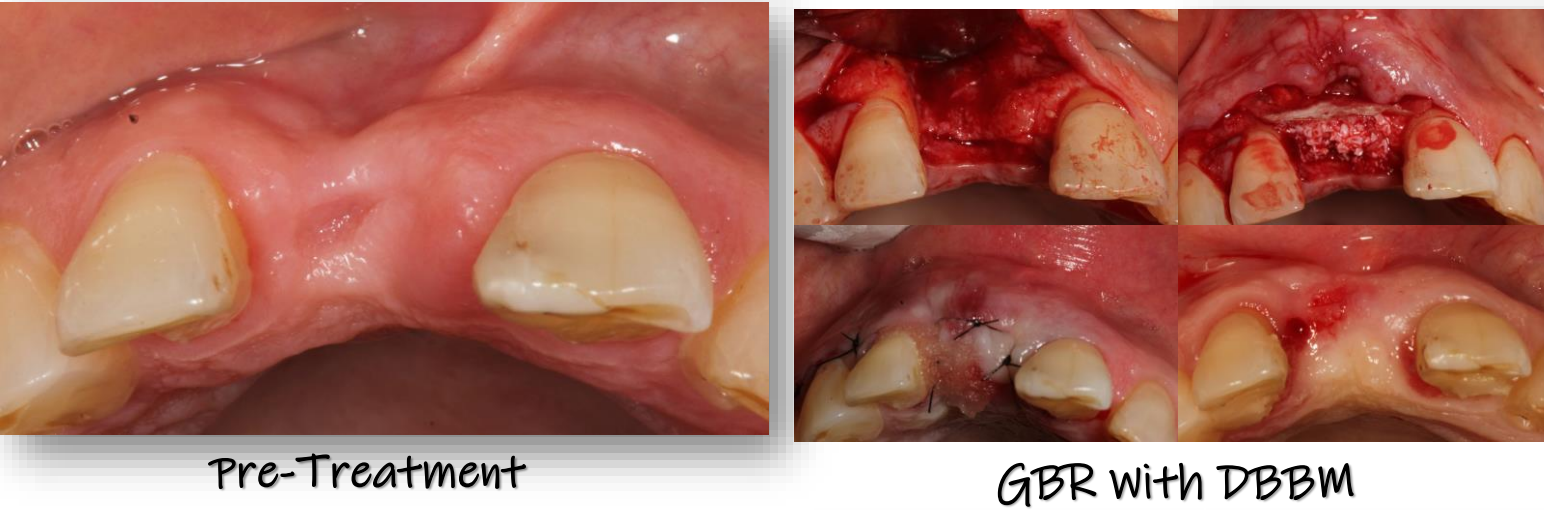
RECOMMENDED CHOICE OF ABUTMENT:

- Custom Pre-milled
- Esthetic/Anatomic
- Stock (SP/ANG)
- Ti-Zr Hybrid Abutment



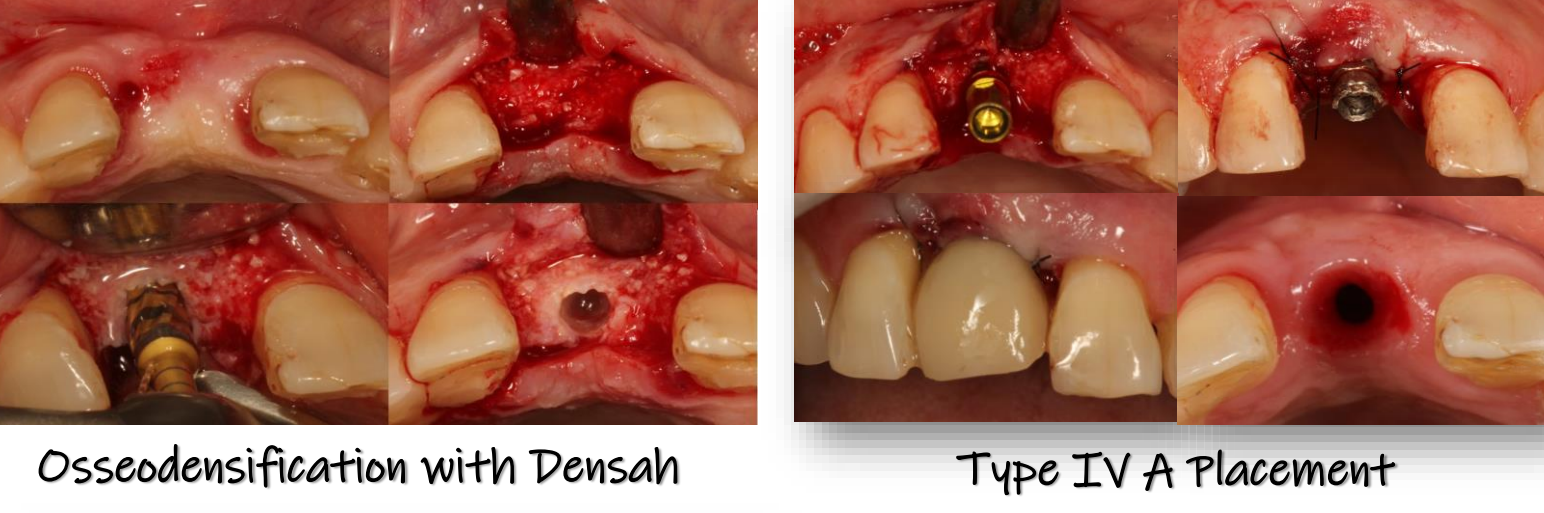
Pre-Treatment

GBR with DBBM



Osseodensification with Densah

Type IV A Placement



Custom Pre-Milled Abutment

Cement Retained PFM FDP

Post Treatment

At 28month follow up



Abutment selection: Centered

IMPLANT LOCATION: Centered

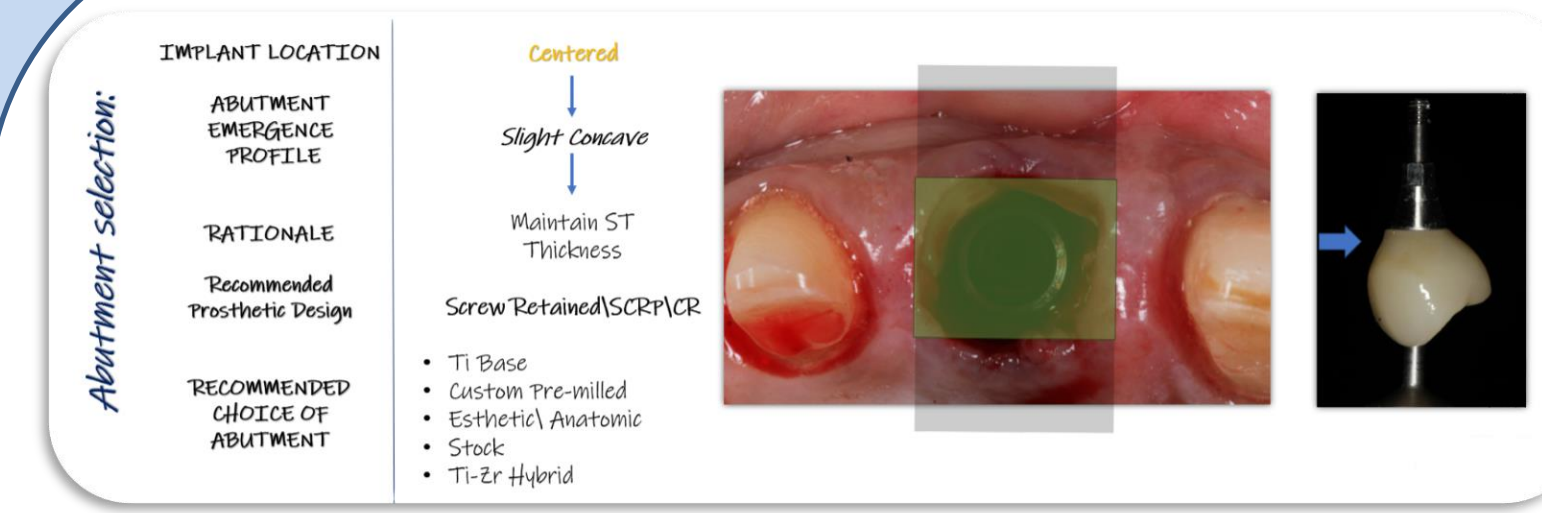
ABUTMENT EMERGENCE PROFILE: Slight Concave

RATIONALE: Maintain ST Thickness

Recommended Prosthetic Design: Screw Retained/SCR/CR

RECOMMENDED CHOICE OF ABUTMENT:

- Ti Base
- Custom Pre-milled
- Esthetic/Anatomic
- Stock
- Ti-Zr Hybrid

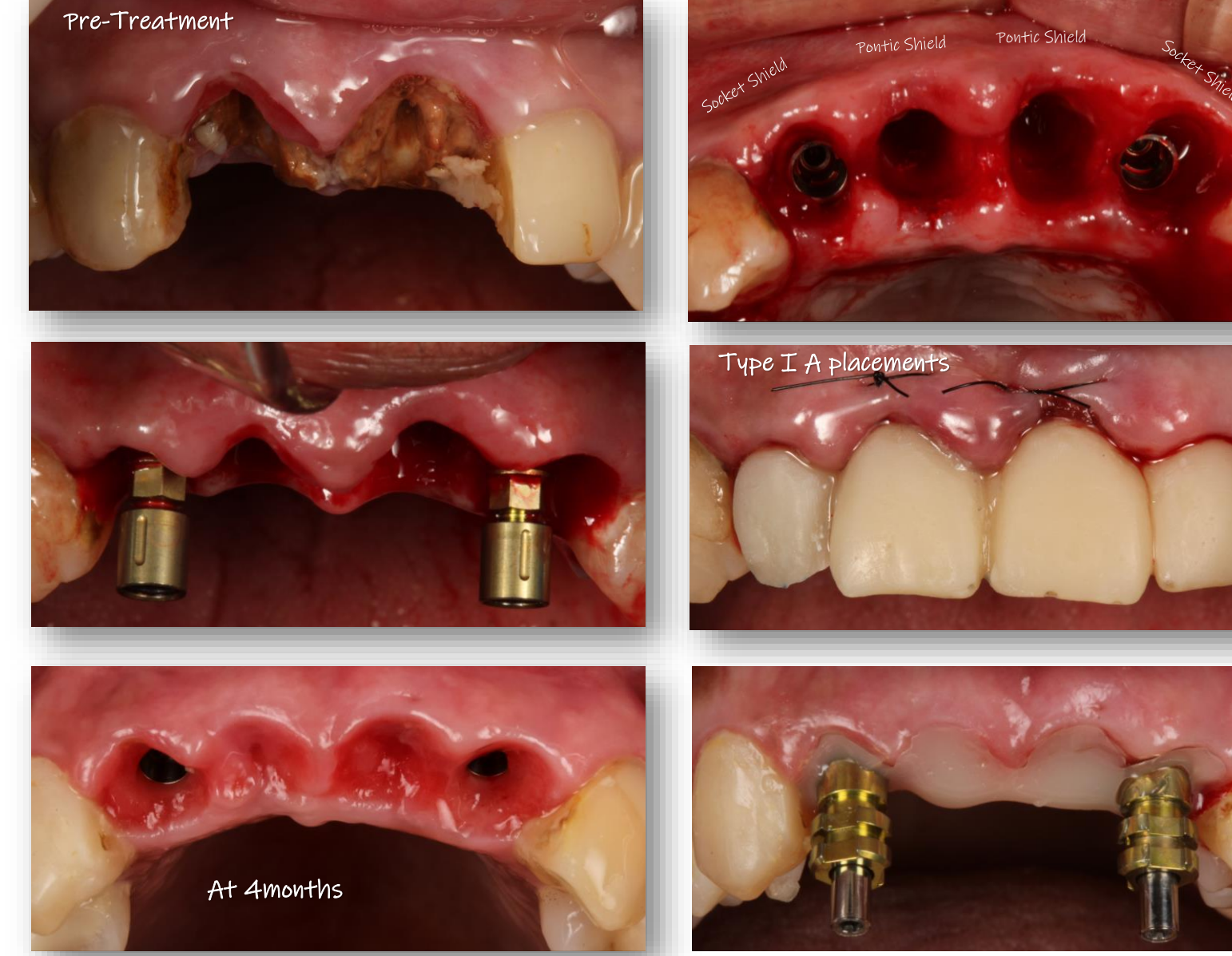


Pre-Treatment

Socket Shield

Type I A placements

At 4months



'F-Pontic Design'

'F' design' allows to adapt the pontic without applying excessive pressure on the pontic sites (≤ 0.5-1 mm into the mucosa)

Screw Retained PFM on Ti Base abutments

Post Treatment



Abutment selection: Relaxed

IMPLANT LOCATION: Relaxed

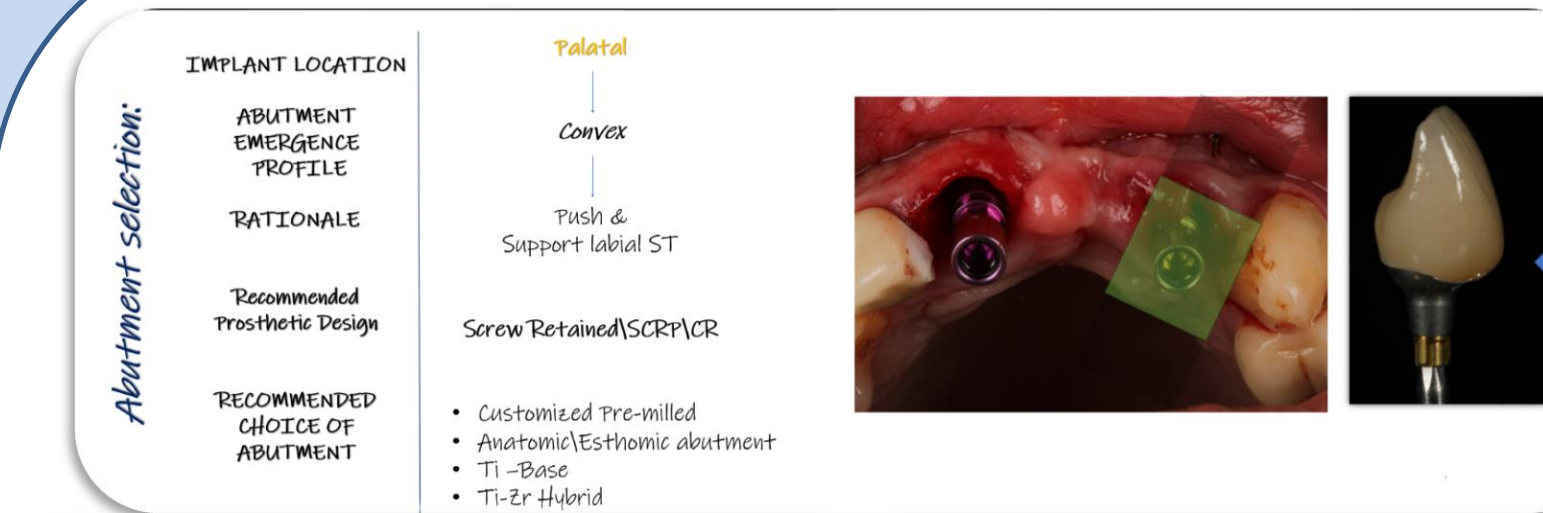
ABUTMENT EMERGENCE PROFILE: Convex

RATIONALE: Push & Support labial ST

Recommended Prosthetic Design: Screw Retained/SCR/CR

RECOMMENDED CHOICE OF ABUTMENT:

- Customized Pre-milled
- Anatomic/Esthetic abutment
- Ti-Base
- Ti-Zr Hybrid

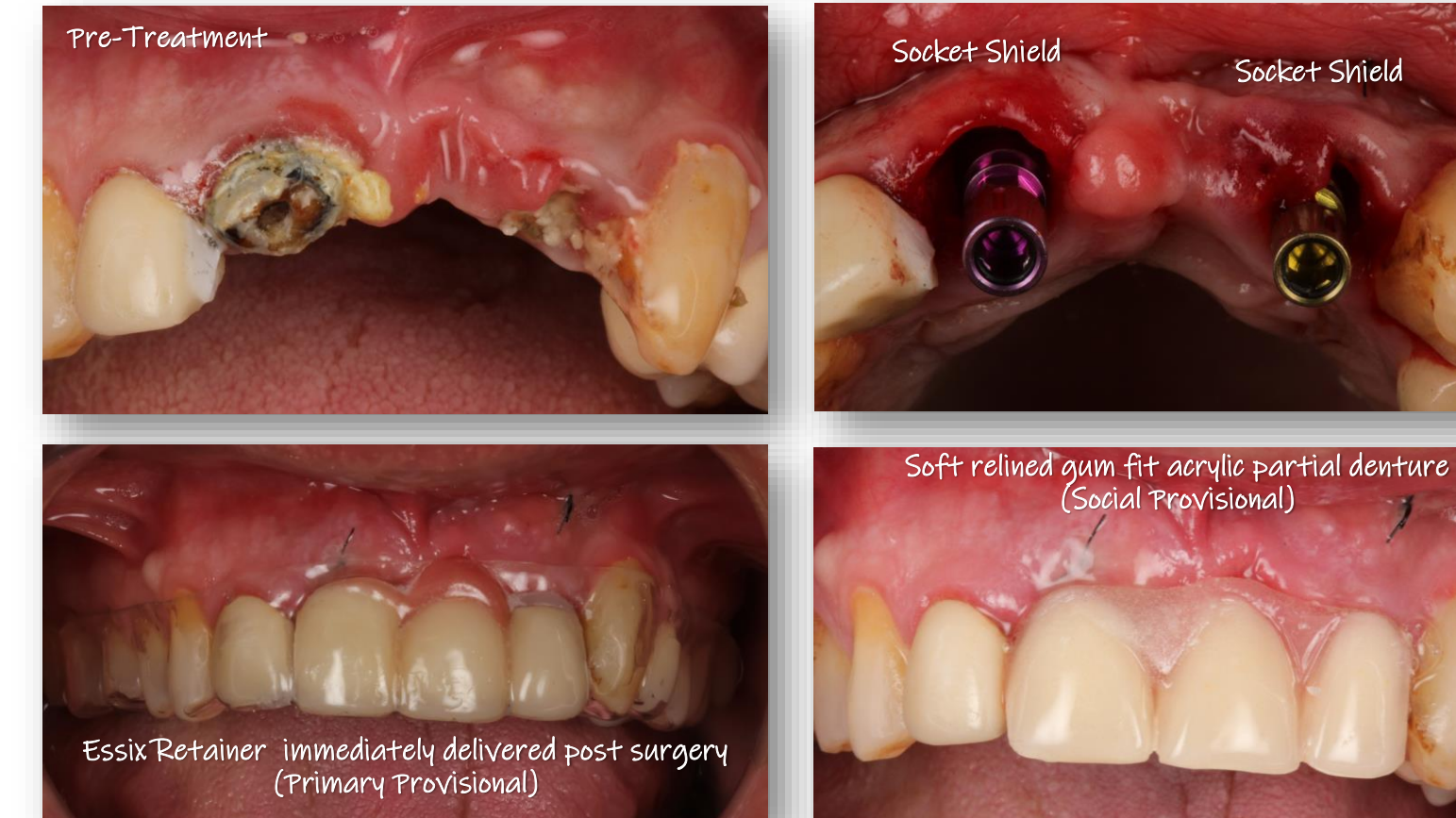


Pre-Treatment

Socket Shield


Soft relined gum fit acrylic partial denture (Social Provisional)

Essix Retainer immediately delivered post surgery (Primary Provisional)



At 4months

IOS Triple Scan Treatment & CAD/CAM's Transition



'S-Pontic Design'

It is of the utmost importance to the biological health of the restoration that the pontic design, and applied to the desired gingival margin level.

Post Treatment

