

SFOT

Orthognathic set up & dentoalveolar compensations...

Identifier: 20 year old caucasian female

Chief complaint: "I am here because my orthodontist would like me to have surgery before I have surgery"

Medical history: Allergies, history of Eczema

Current medications: Singulair, Zyrtec, Nasonex, eye drops (allergy related), Mometasone furota

Physical status classification: ASA I

*Class II malocclusion
Plaque associated gingivitis*

Initial Exam



Frontal & Buccal views

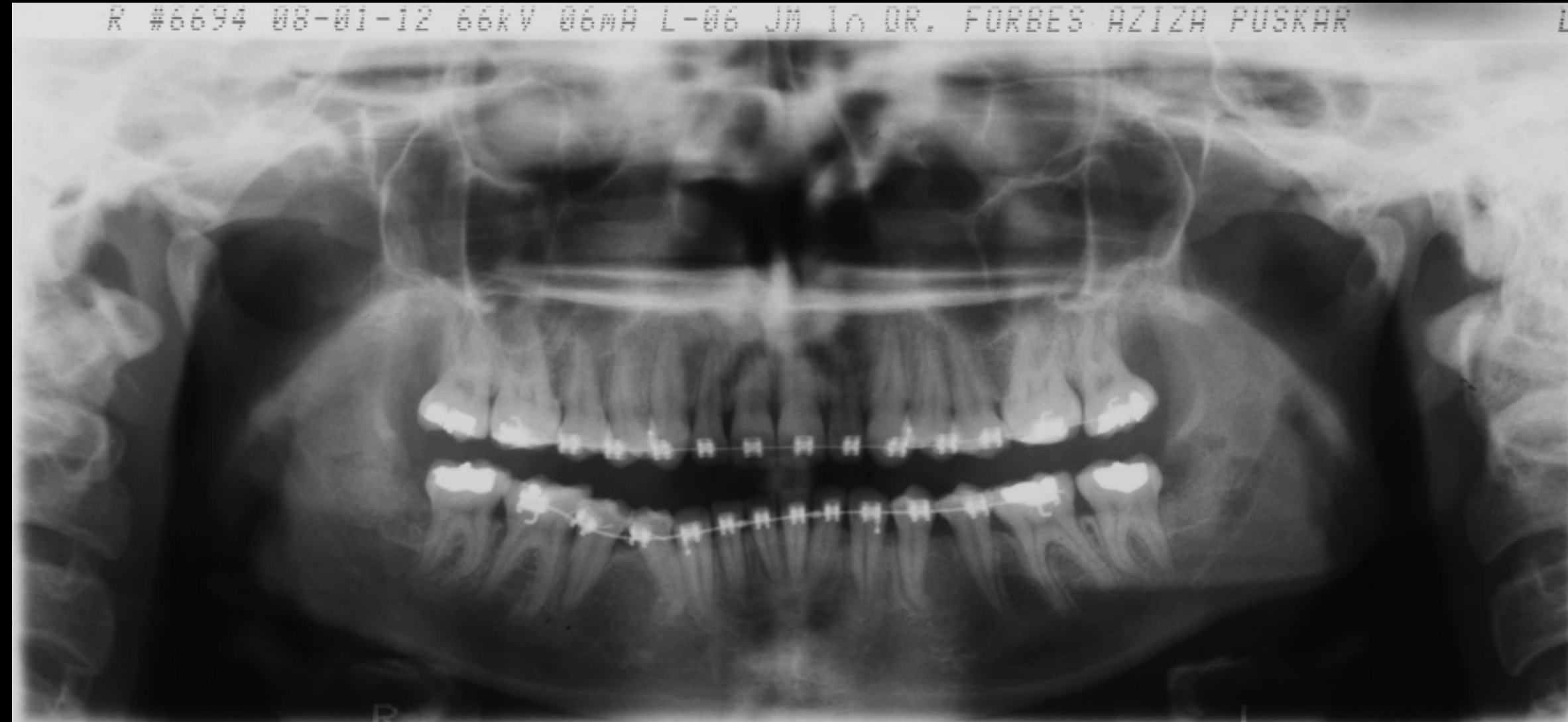
Initial Exam



Occlusal views

Radiographs

Crowding



Class II

Typical Treatment Plan

"We can not solve problems by using the same kind of thinking we used when we created them"
Albert Einstein

Problem

Management

Dentoalveolar compensations



Orthodontic decompensation tooth movement

Skeletal malocclusion



Orthognathic surgery

**Assessment of Dentoalveolar bone?
Periodontal risk assesment?**



Possible medicolegal related periodontal consultation to OK tooth movement.

Assessment of attached gingiva

Skeletal based problems

Dentoalveolar compensations

Imaging

CBCCT Evaluation

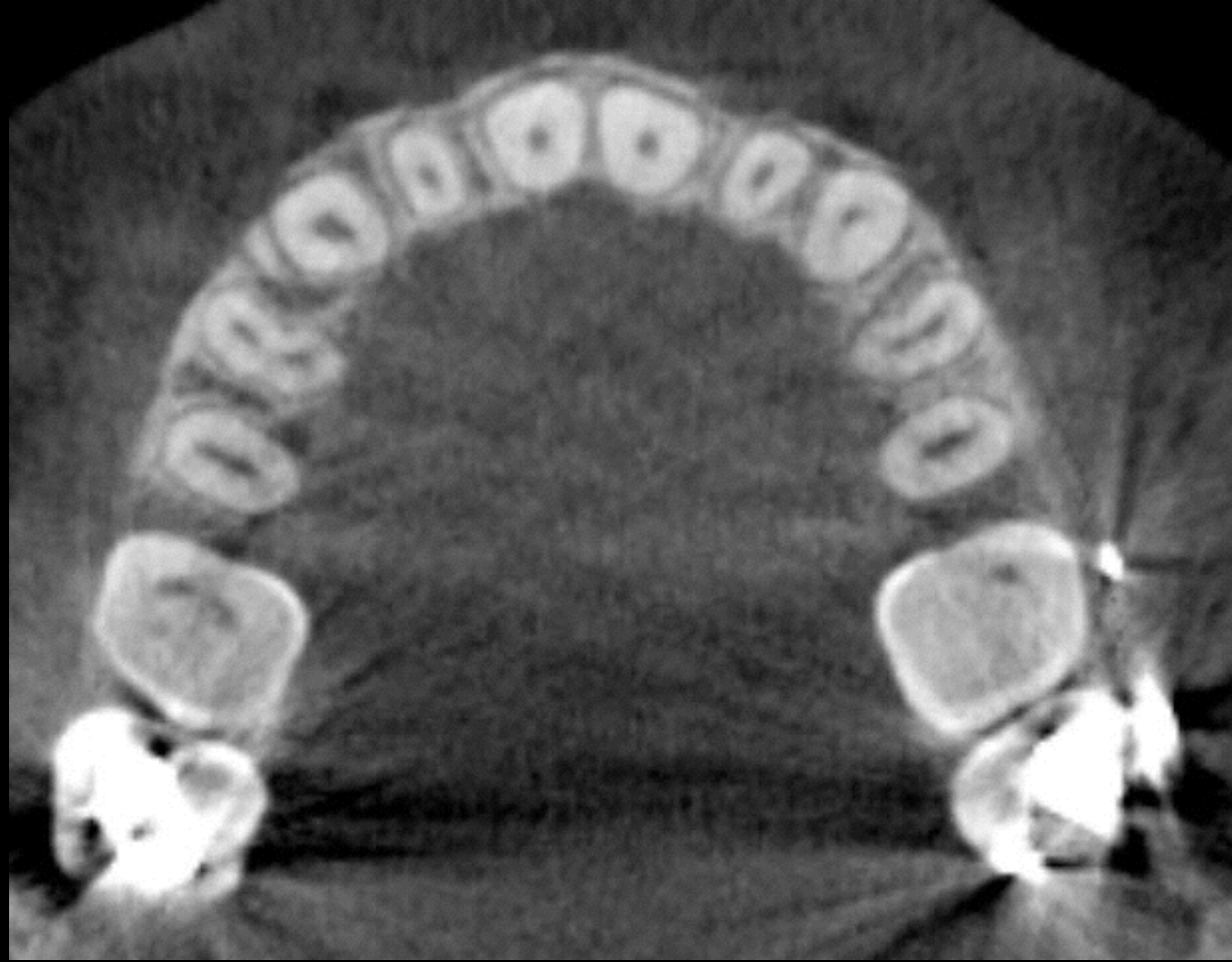
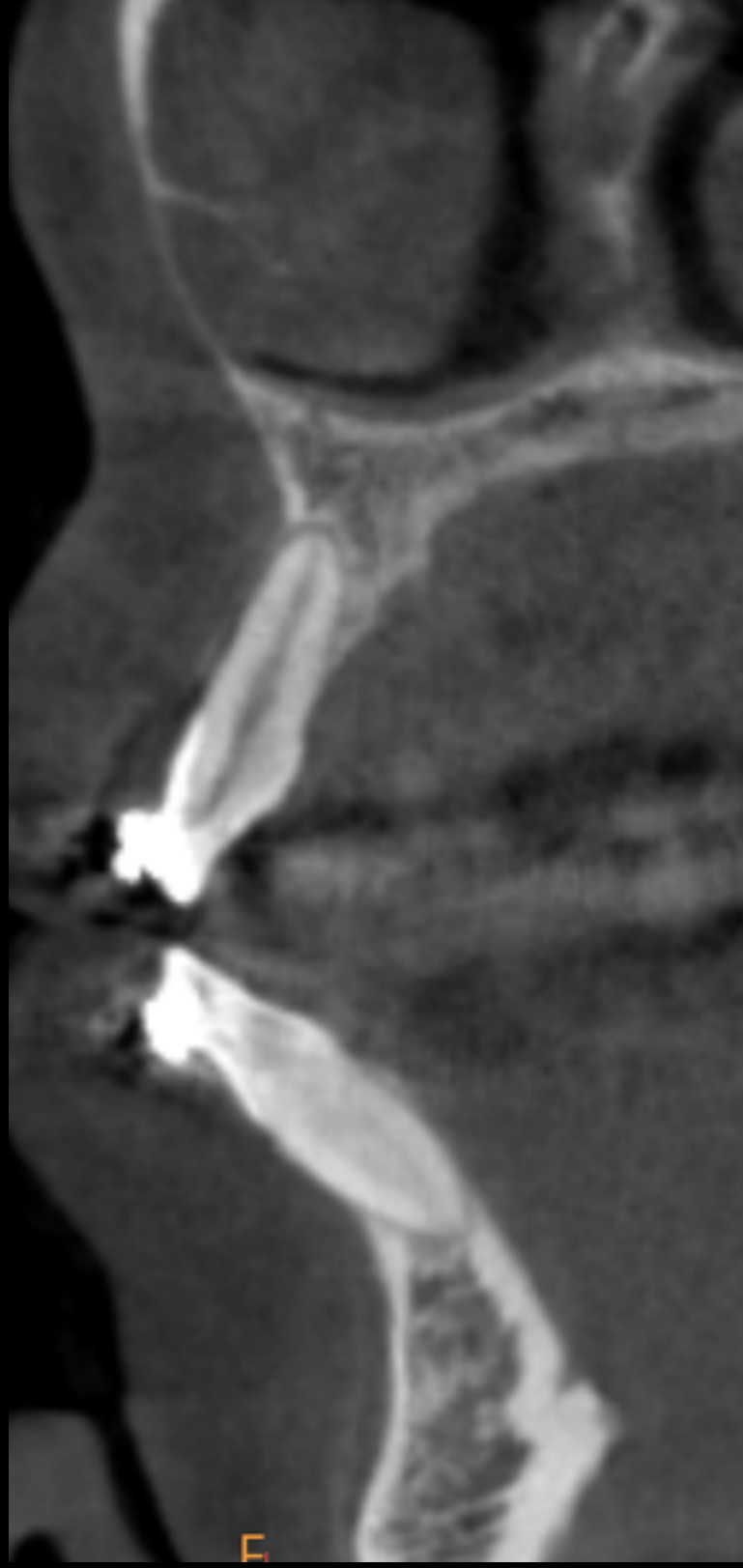


assessment

3D CranioMandibular

Imaging

Anterior tooth relationship



Risk

Dentoalveolar bone phenotype

Facial bone analysis

SFOT Treatment Plan

Problem

Dentoalveolar compensations



Orthodontic Decompensations



Short crown heights
Altered active/passive eruption



Esthetic Crown Enhancement

Thin crestal
Thin radicular
Dentoalveolar bone phenotype



S F O T



Skeletal malocclusion



Orthognathic
Surgery



Re - evaluating the problem

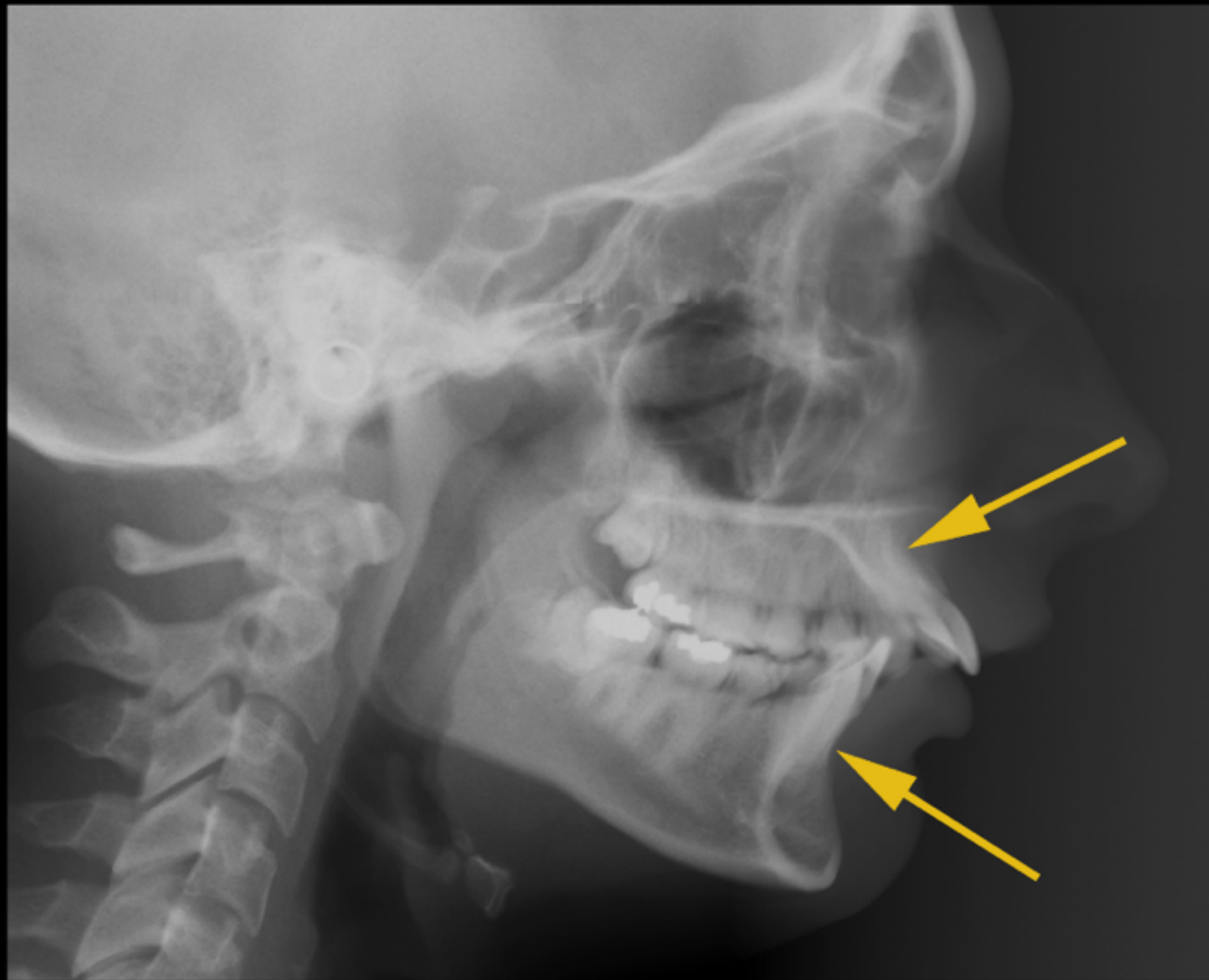
Changing Paradigms



*Re-evaluating risk
Dentoalveolar bone vs. gingiva*

Thin Facial Bone

Orthodontic walls



*Dentoalveolar Decompensation
challenges*

Surgery

SFOT Surgery Pre Op
Mandible



SFOT Surgery Pre Op
Mandible

Healing assessment

3 week post op



3 months post op

Pre Op



3 months post op SFOT mandible



Profile

Volume Change



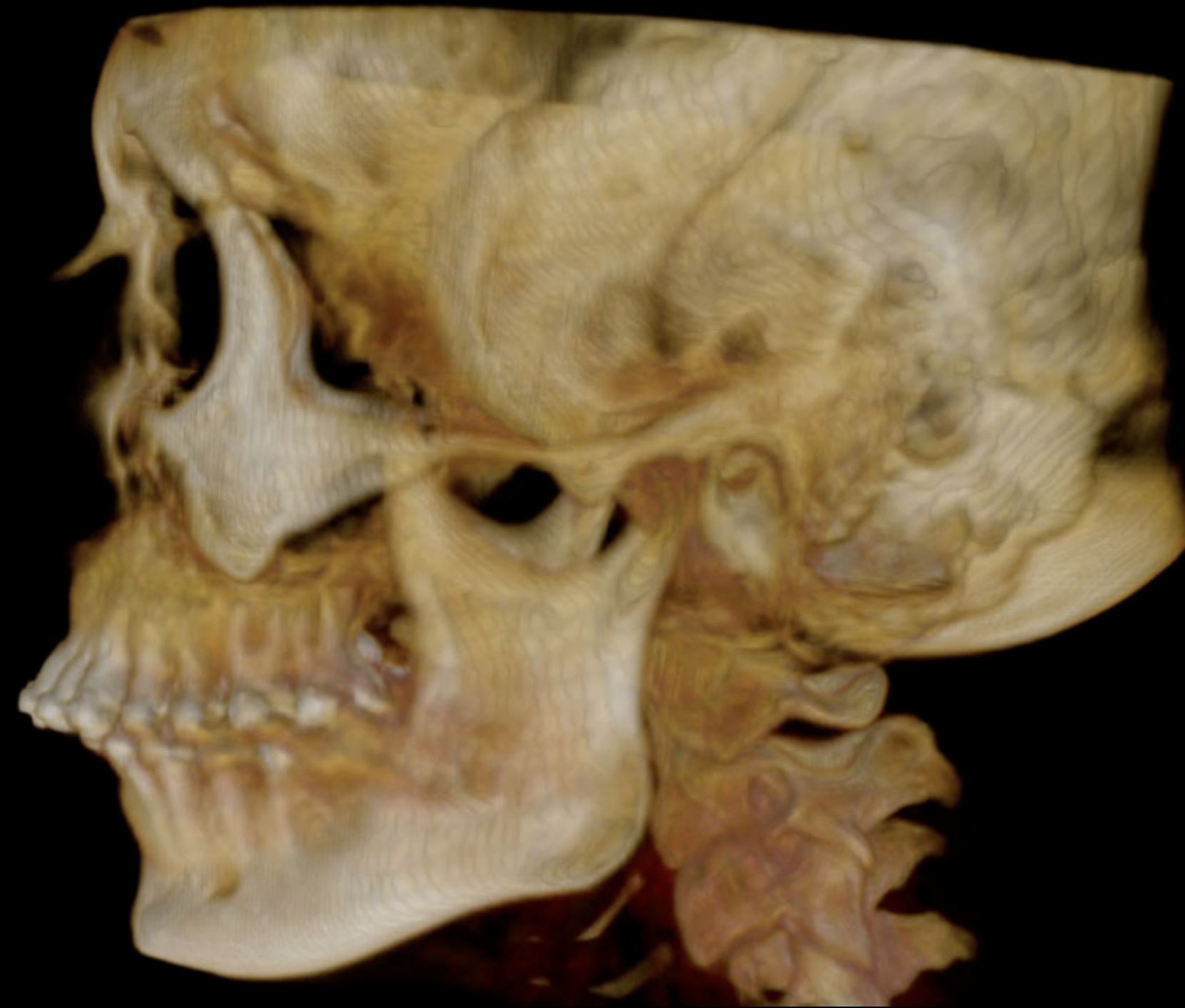
3 months post op - maxilla
7 months post op - mandible



3 week post op

Outcome Assessment - Imaging

3D assessment post SFOT



1 month post SFOT - maxilla
4 months post SFOT - mand

Outcome Assessment at MP1

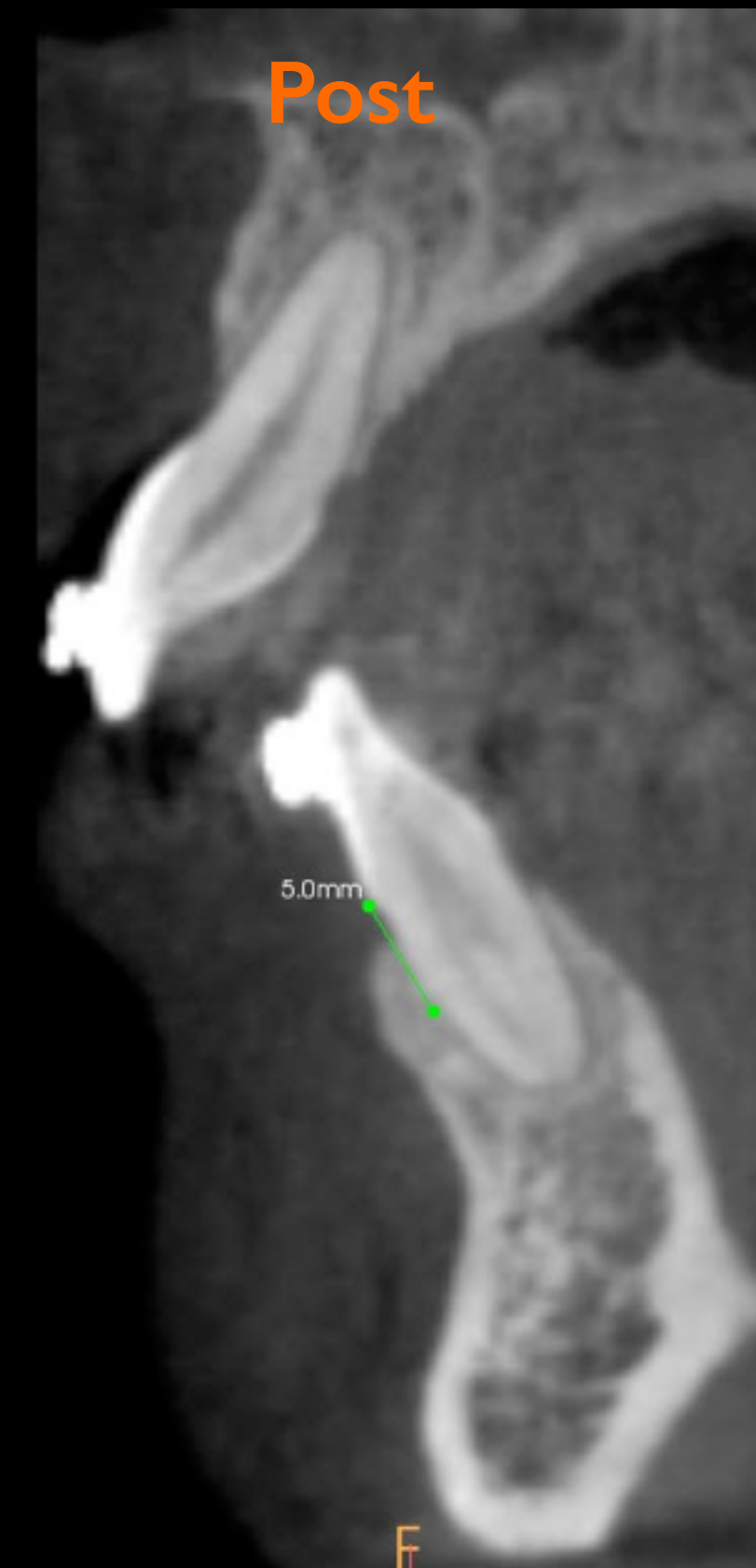
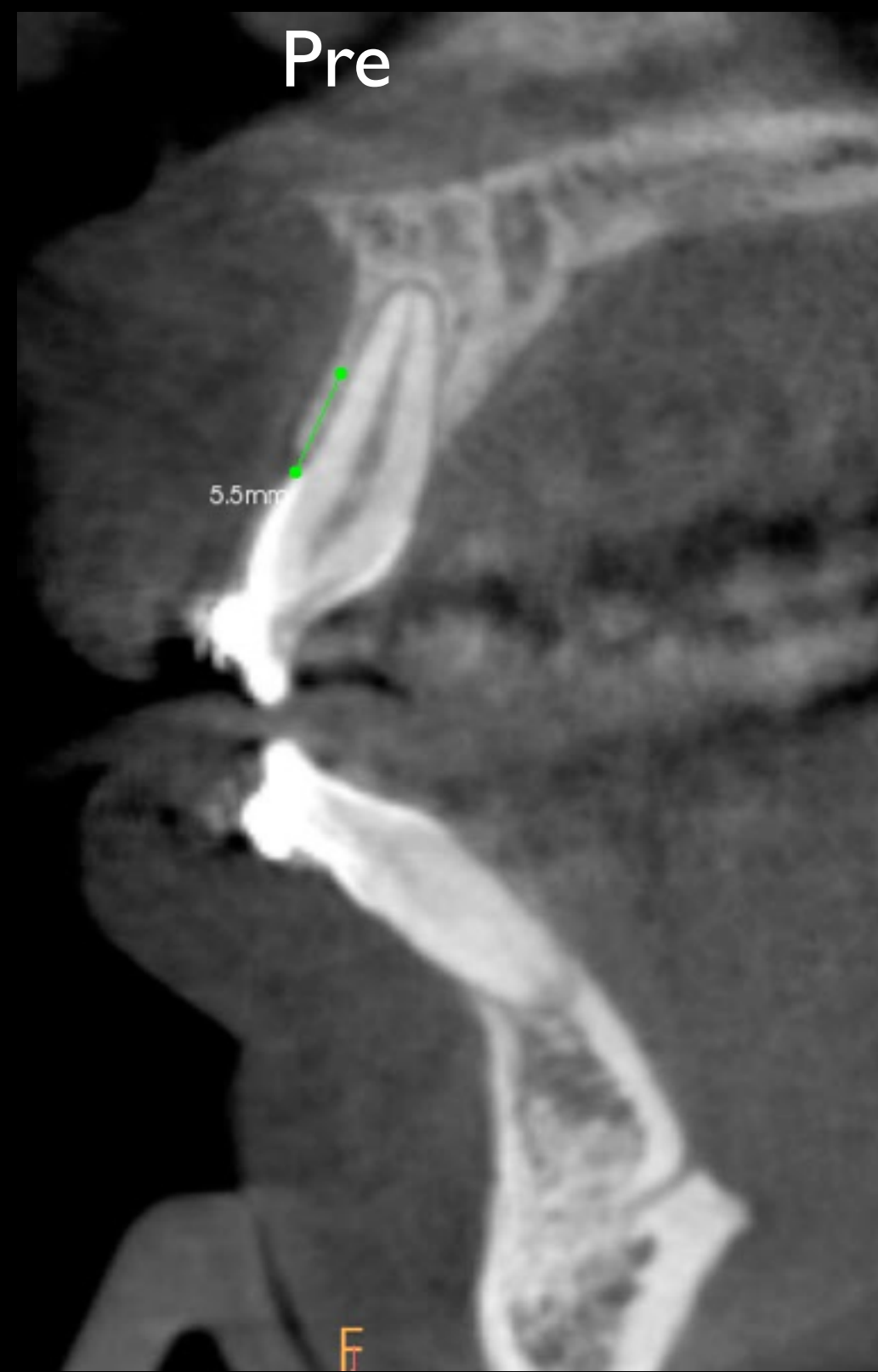
*Cross sectional comparison
Dentoalveolar bone changes*



*7 month post SFOT - maxilla
10 months post SFOT - mand*

Outcome Assessment at MP2

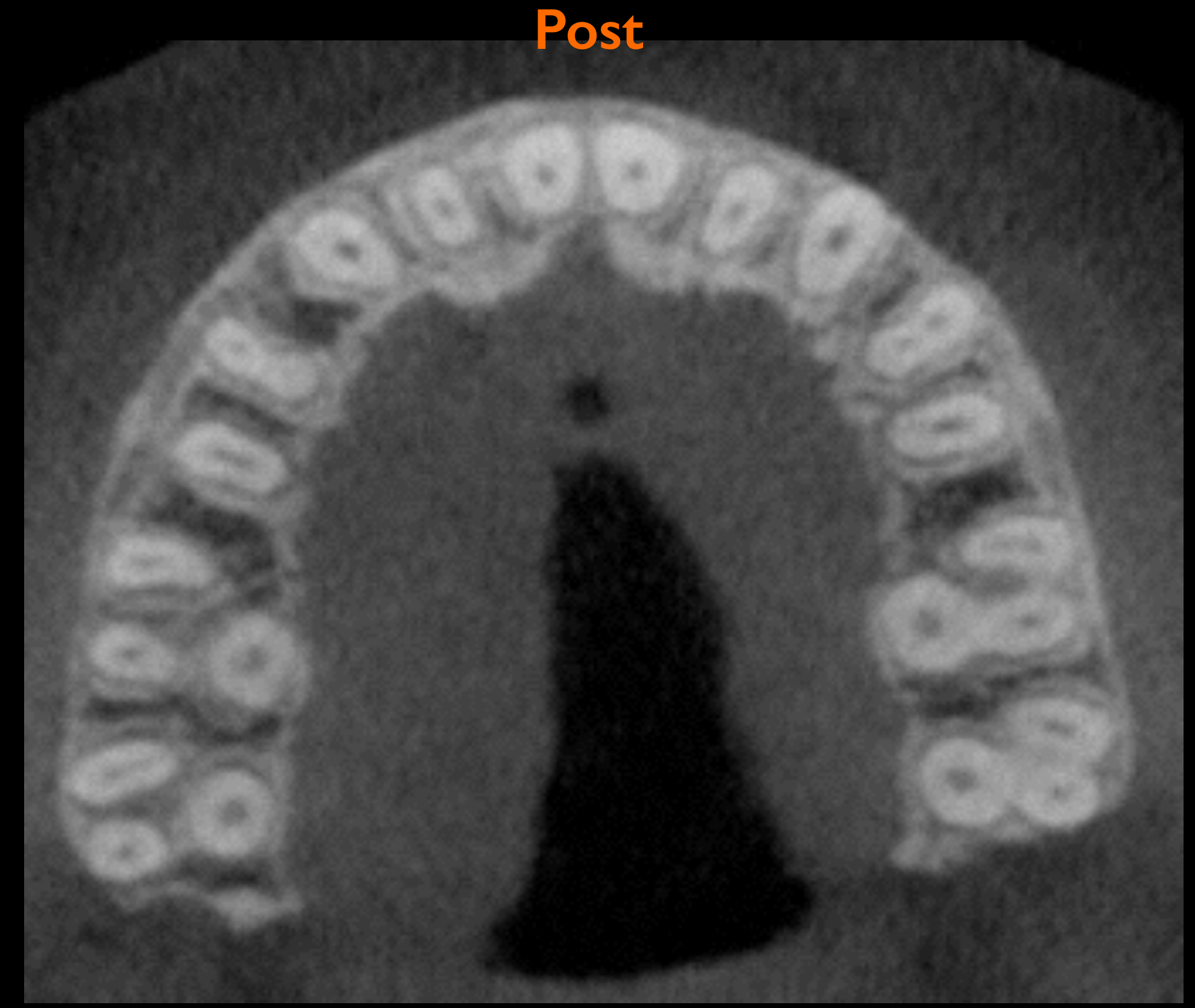
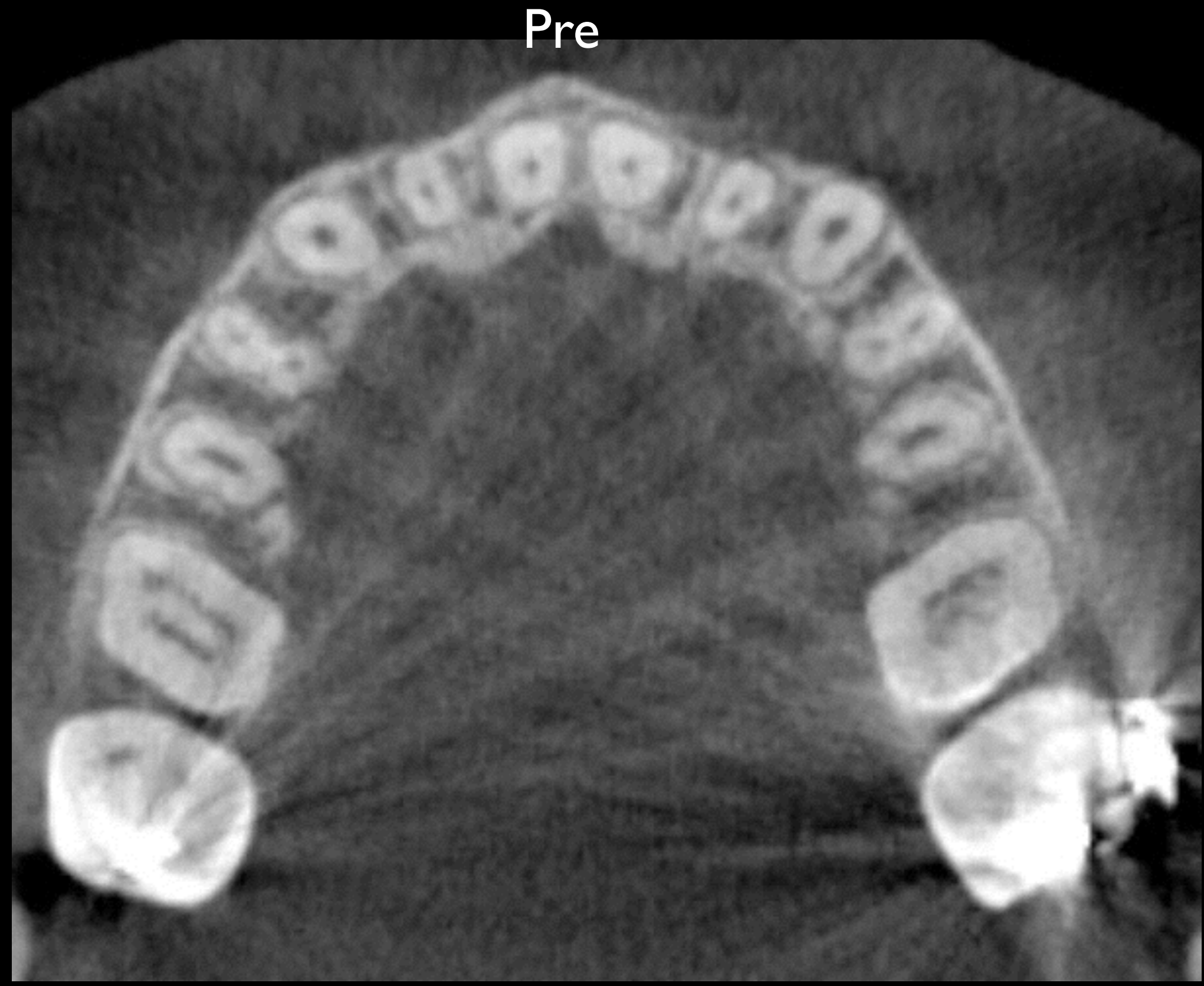
*Cross sectional comparison
Dentoalveolar bone changes*



*7 month post SFOT - maxilla
10 months post SFOT - mand*

Outcome Assessment at MP1

*Axial view comparison - max
Dentoalveolar bone changes*



*7 month post SFOT - maxilla
10 months post SFOT - mand*

*Axial view comparison - mand
Dentoalveolar bone changes*

Outcome Assessment at MP1



*7 month post SFOT - maxilla
10 months post SFOT - mand*

*Axial view comparison - max
Dentoalveolar bone changes*

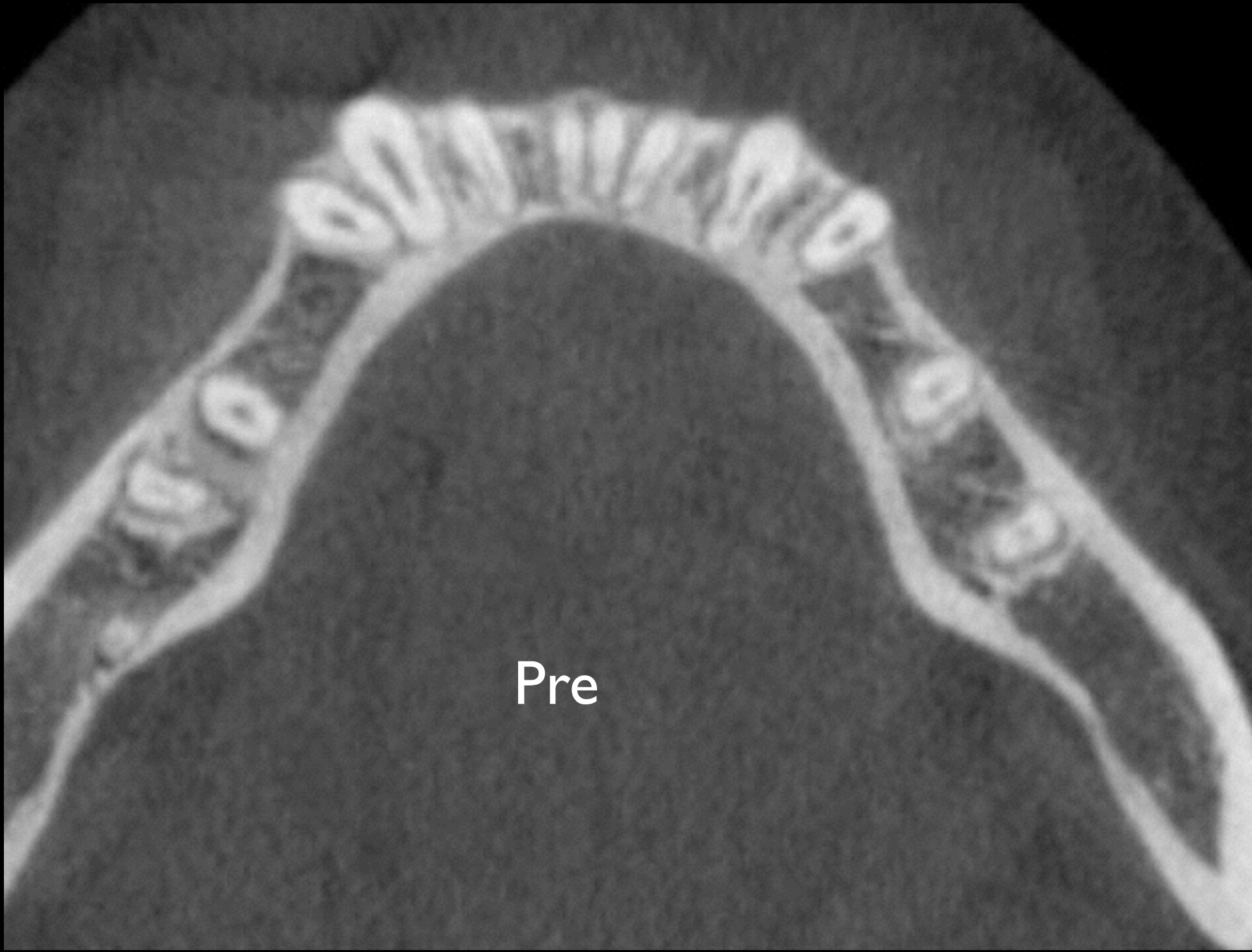
Outcome Assessment at MP2



*7 month post SFOT - maxilla
10 months post SFOT - mand*

*Axial view comparison - mand
Dentoalveolar bone changes*

Outcome Assessment at MP2



*7 month post SFOT - maxilla
10 months post SFOT - mand*

SFOT enhanced dentoalveolar decompensations

*Orthognathic set up
Pre and Post SFOT*



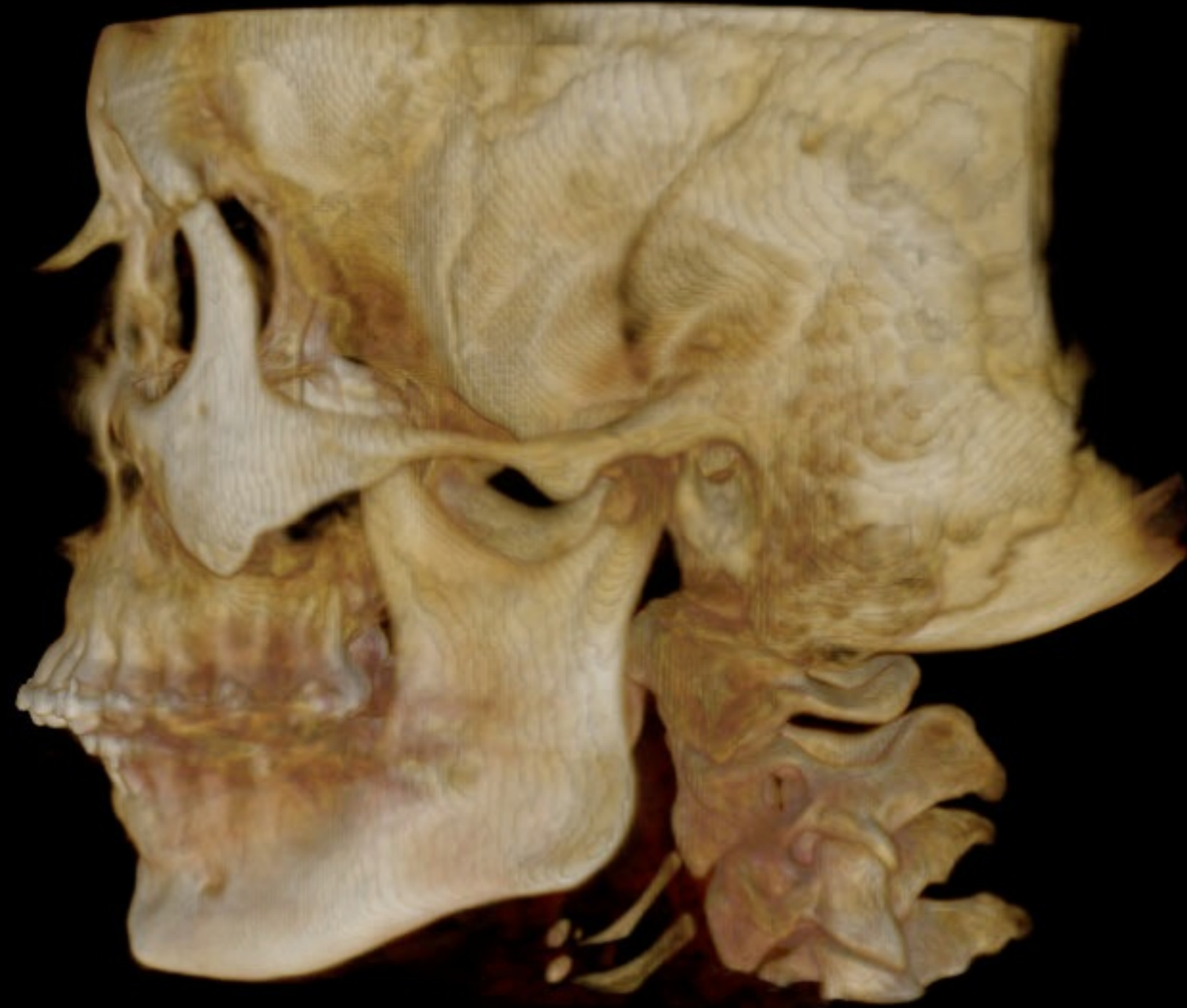
Right lateral

SFOT enhanced dentoalveolar decompensations

Dentoalveolar decompensation

Orthognathic set up

Pre and Post SFOT



Left lateral