



Imagerie CBCT

JF Matern

Cabinet de radiologie
et d'imagerie de Bischwiller

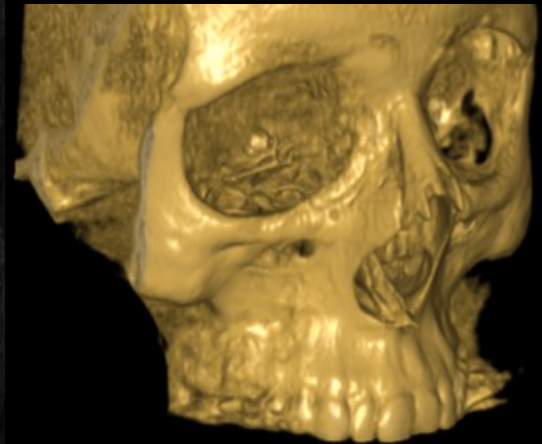
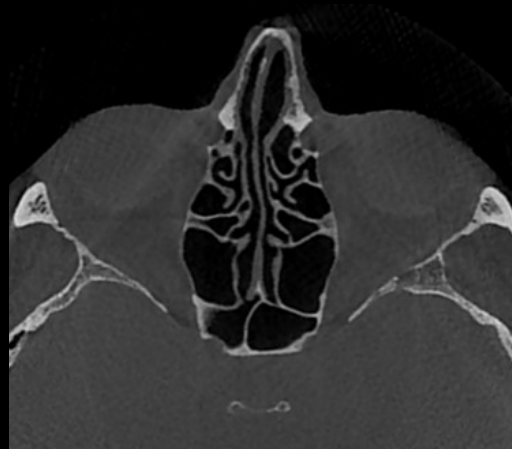


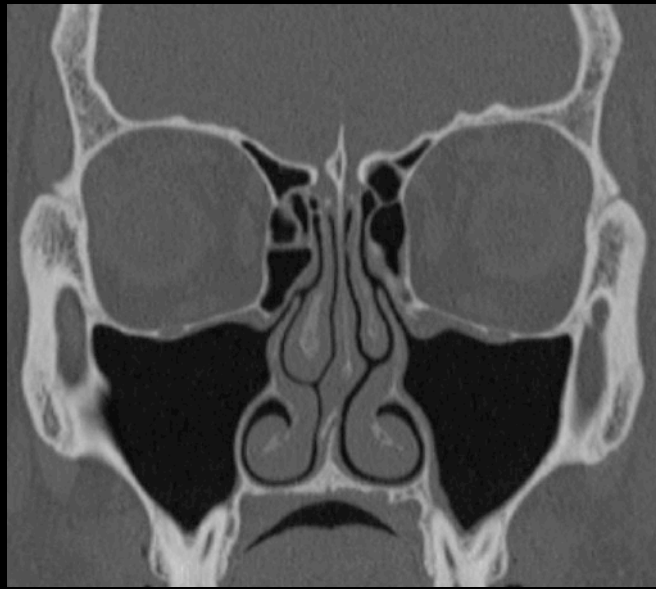
18 cm

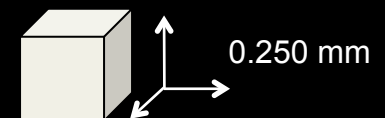
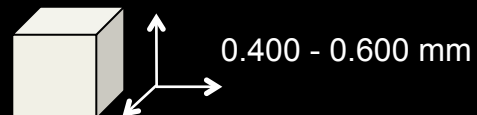
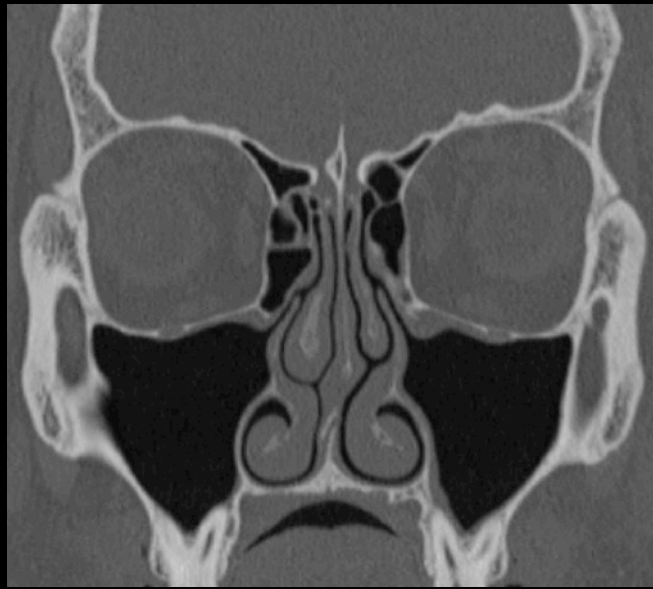


18 cm

Tomographie Volumique à Faisceau Conique









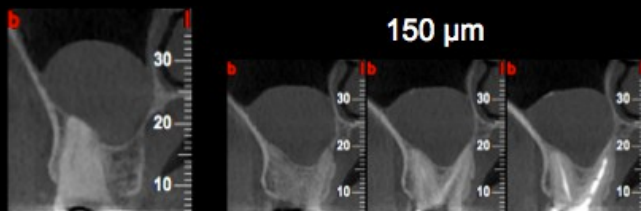
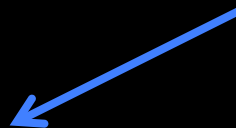
Principe ALARA

« *As Low As Reasonably Achievable* »

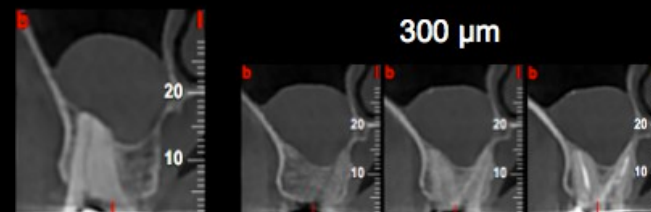
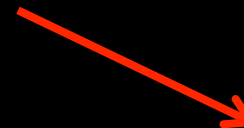
KAD



CBCT ?



150 µm

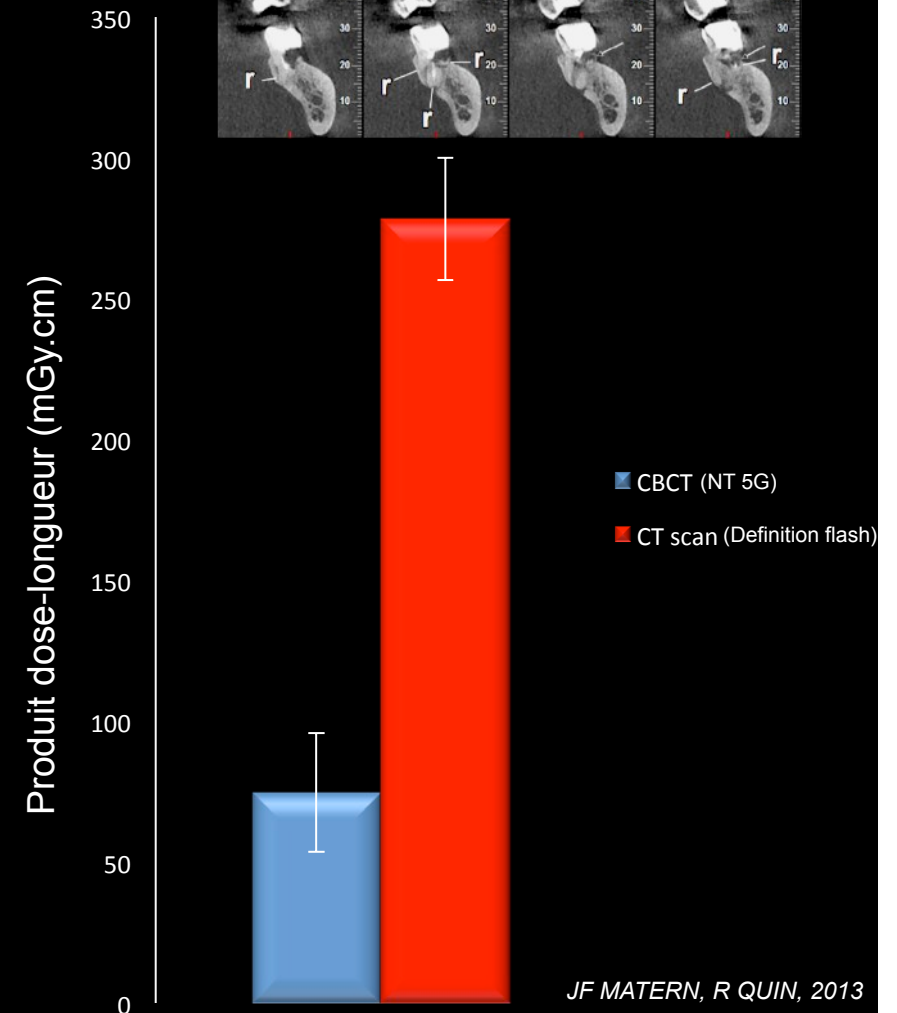
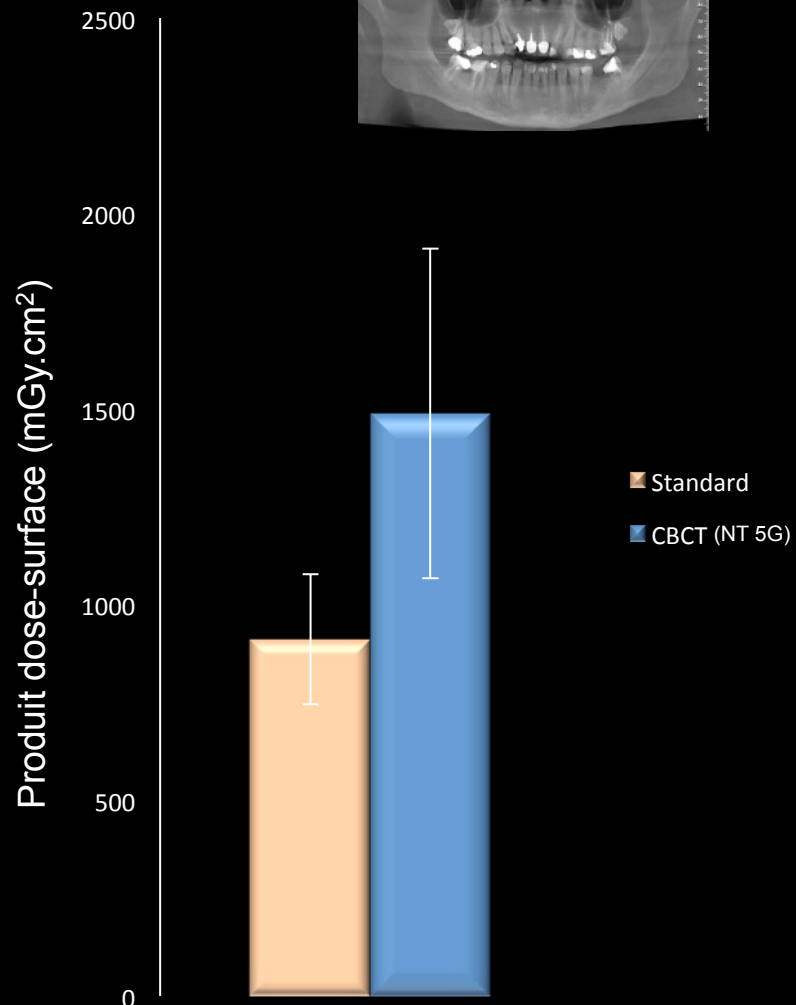
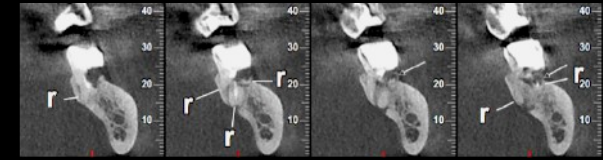
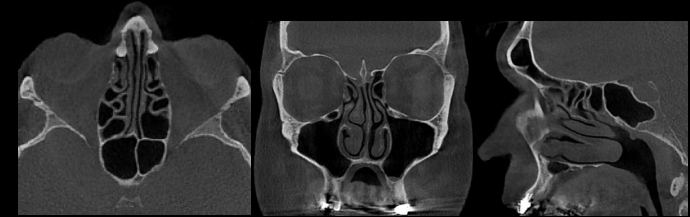


300 µm

Bilan infectieux dento-maxillaire

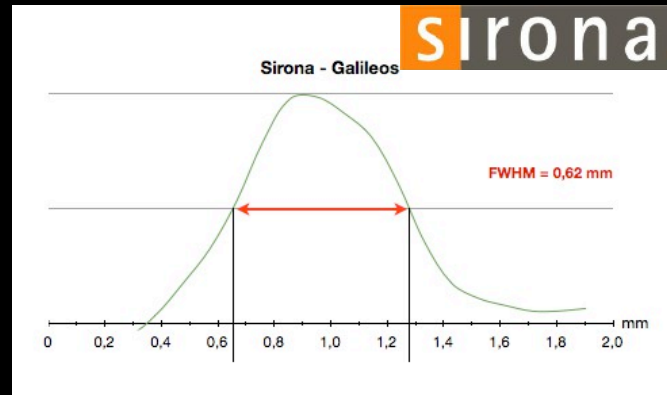
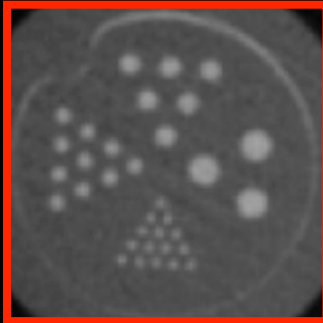


Vs.

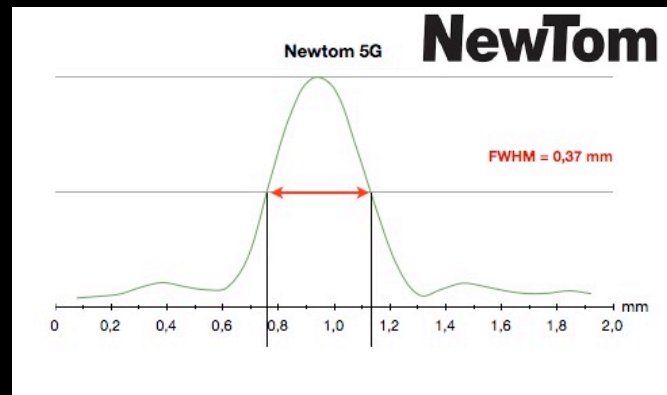


Résolution spatiale

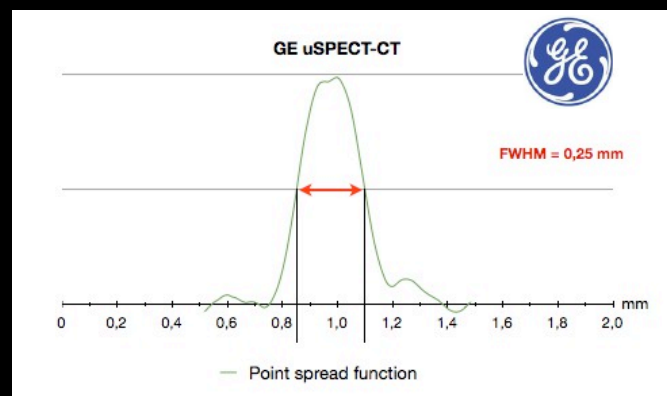
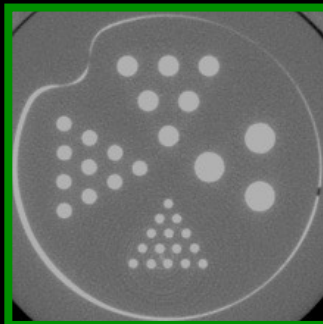
300 μ m



150 μ m

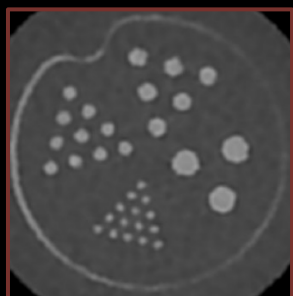


100 μ m

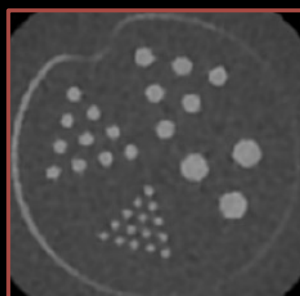


JF MATERN, JP DILLENSEGER, P CHOQUET
UF 6237- Laboratoire d'Imagerie préclinique
Hôpitaux Universitaires de Strasbourg / IMFS

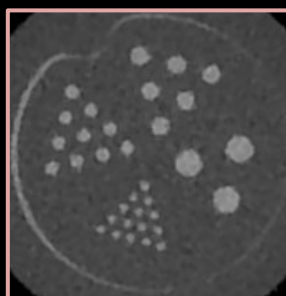
Rétroreconstructions CBCT



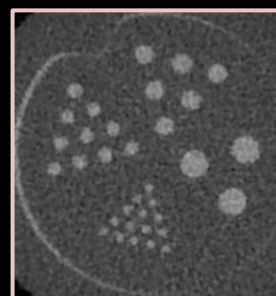
150µm



125µm



100µm



75µm



NewTom

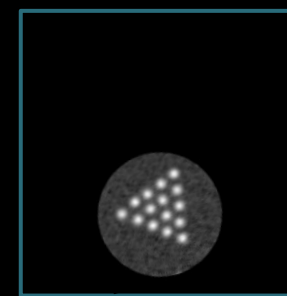


125µm

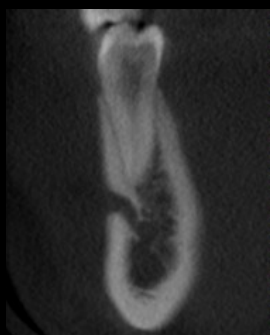
80µm

50µm

20µm



JF MATERN, JP DILLENSEGER, P CHOQUET
UF 6237- Laboratoire d'Imagerie préclinique
Hôpitaux Universitaires de Strasbourg / IMFS



Mars 2010



Novembre 2010

CBCT

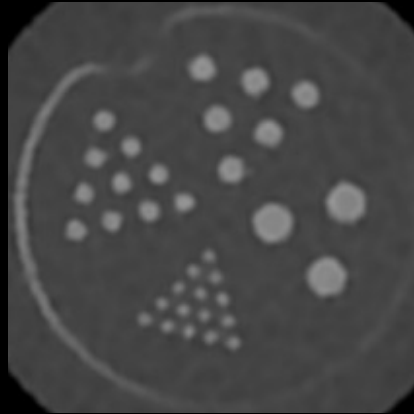
MSCT

Sinus

250 μ m



150 μ m



600 μ m

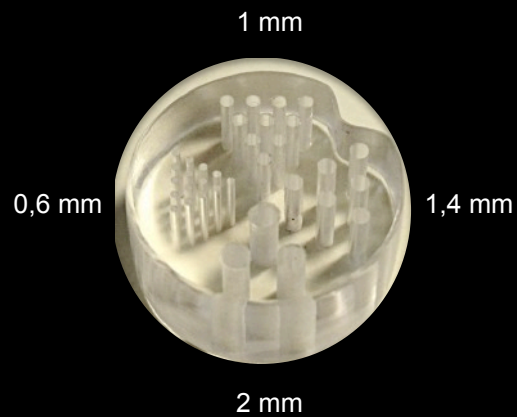
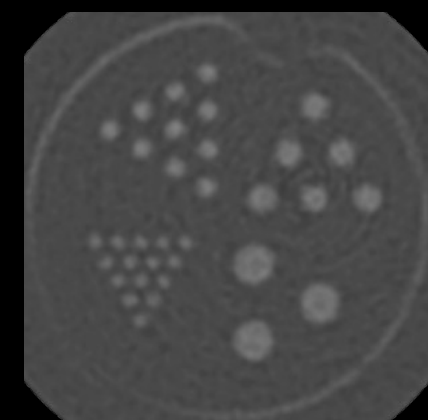


Dental

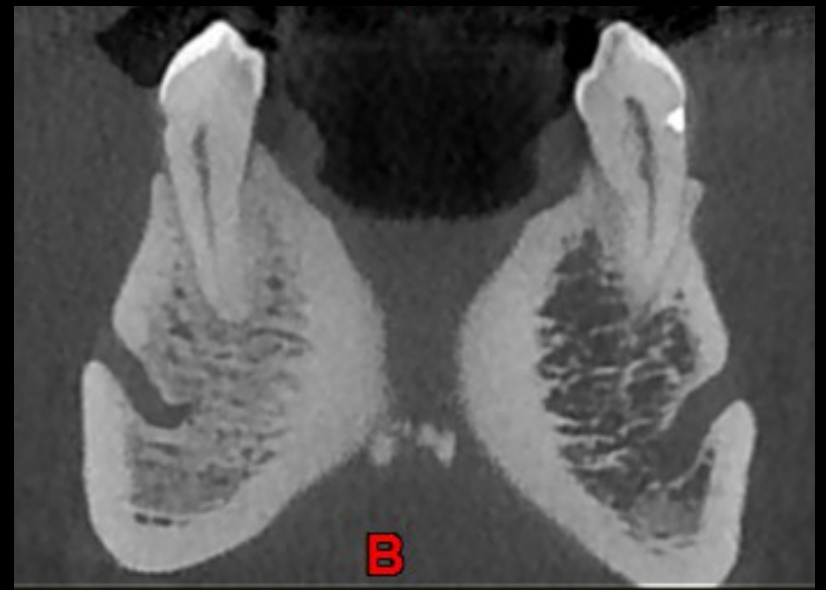
150 μ m



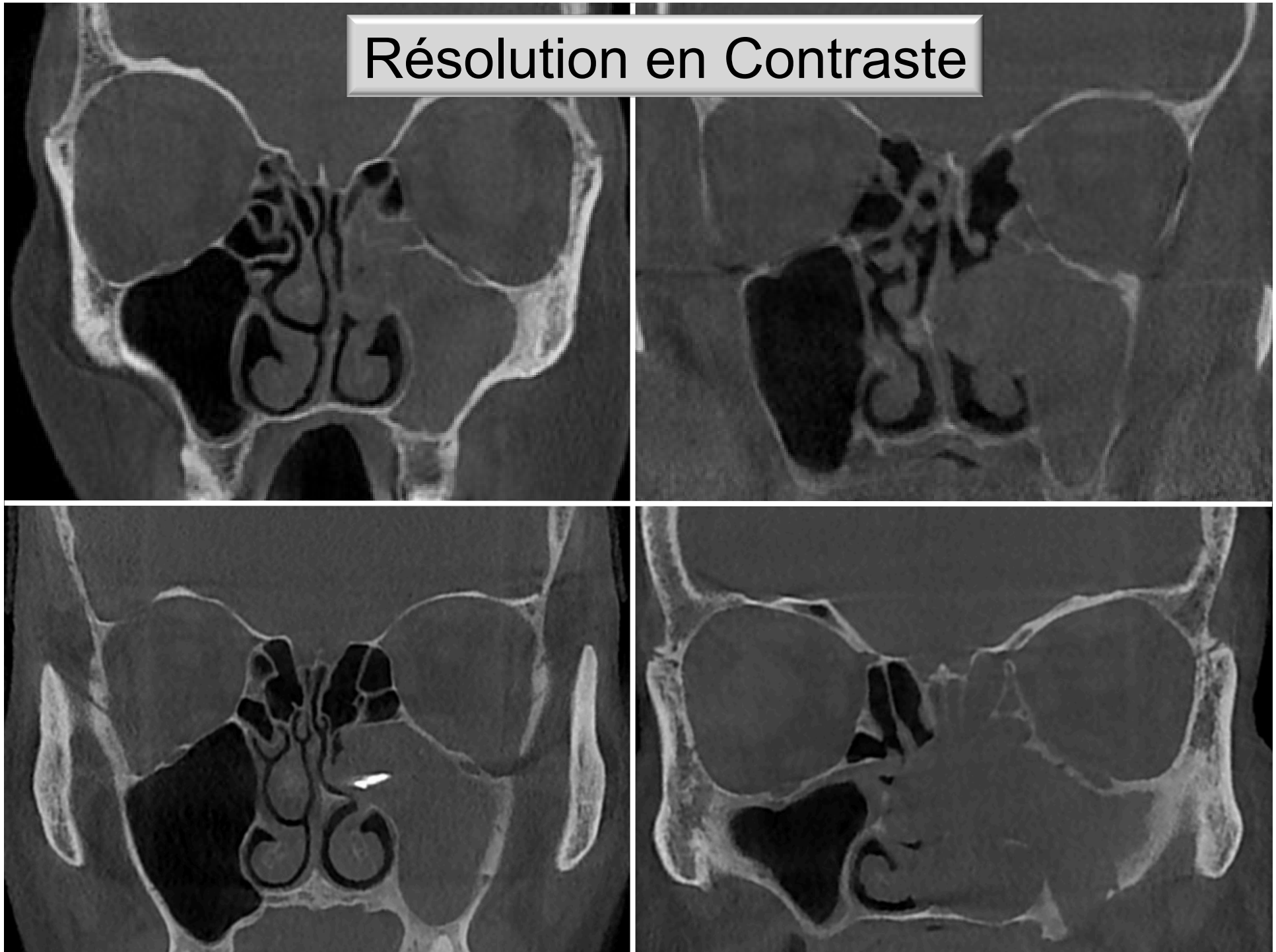
400 μ m



Fantôme de résolution



Résolution en Contraste

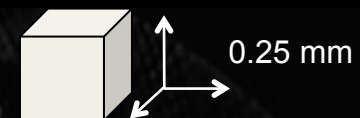




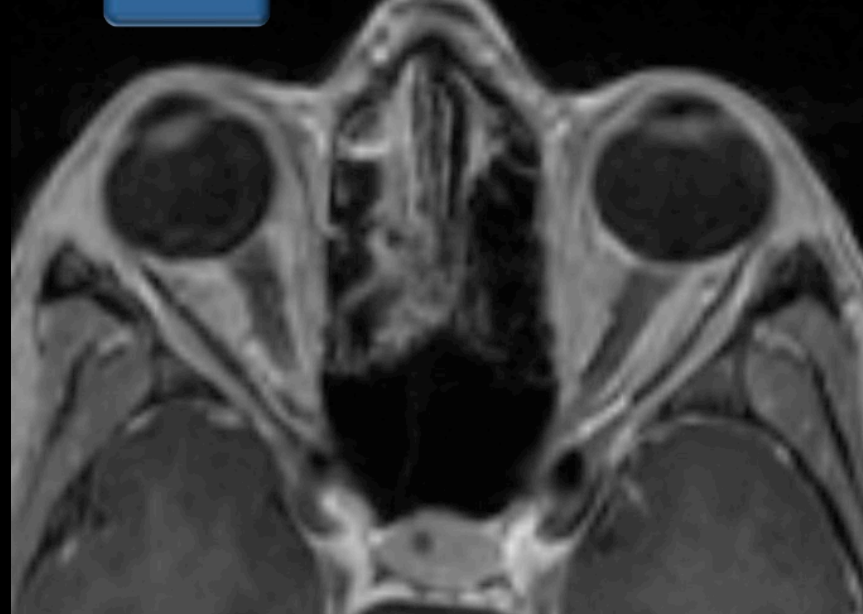
TDM



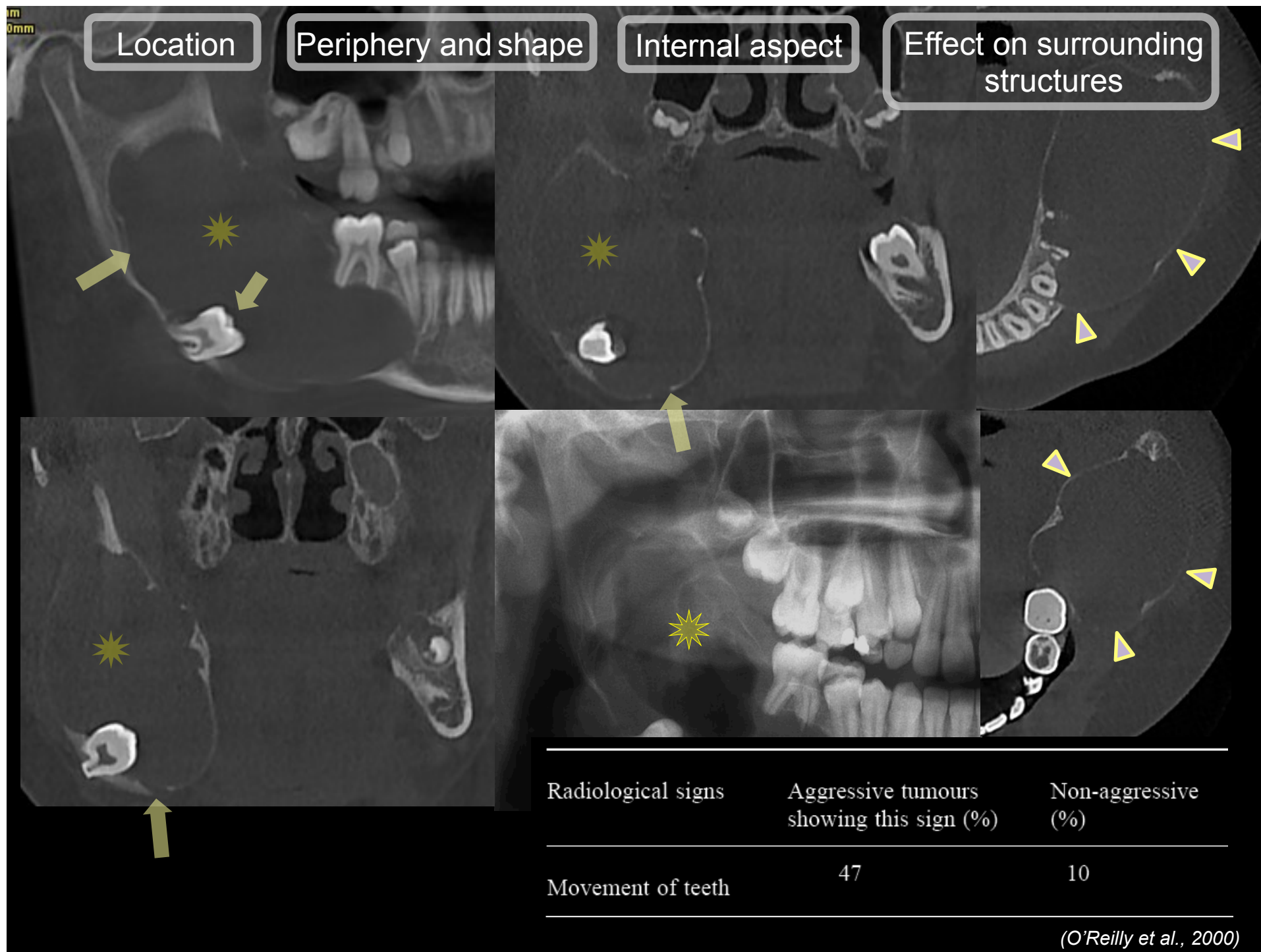
CBCT

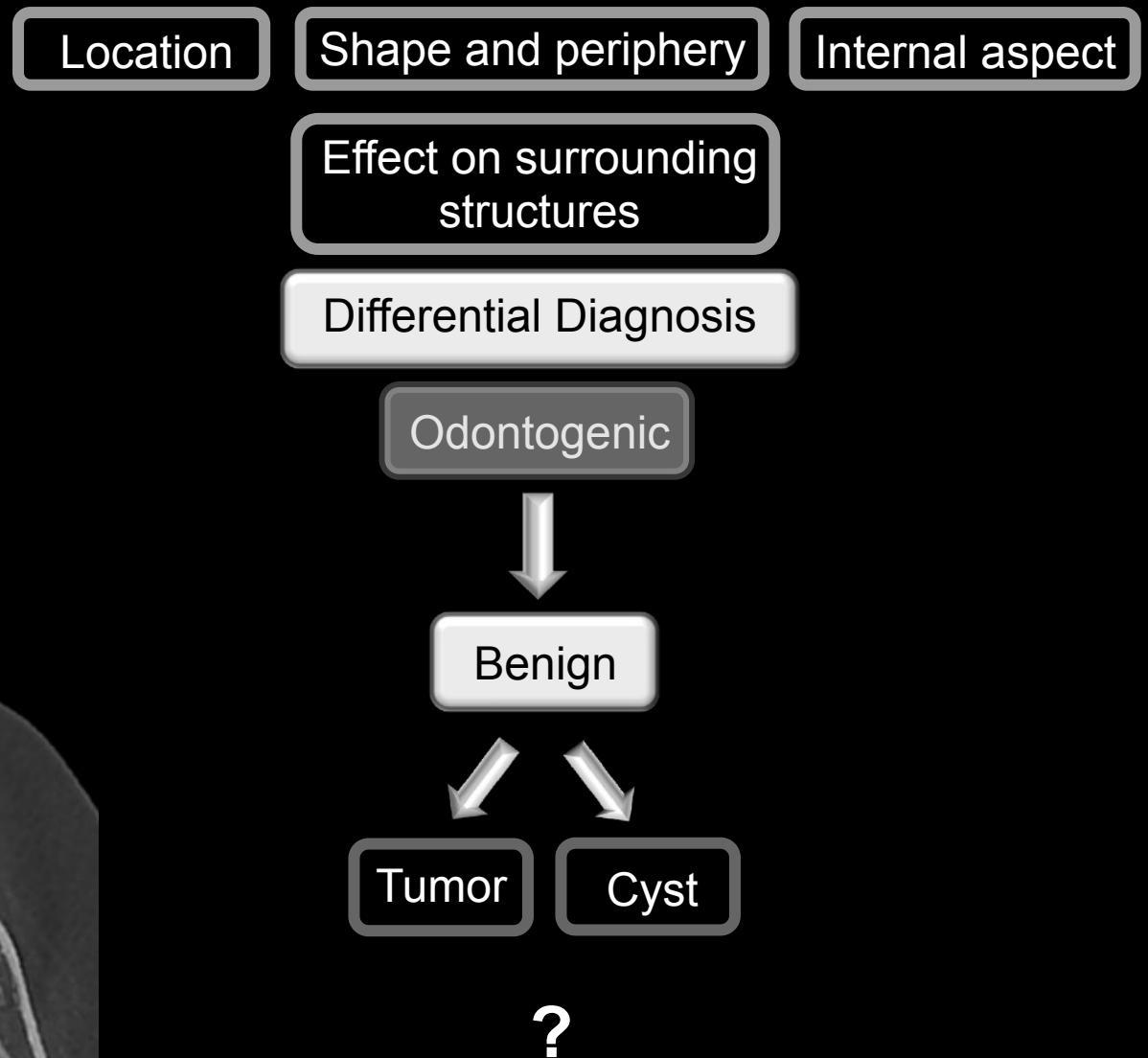
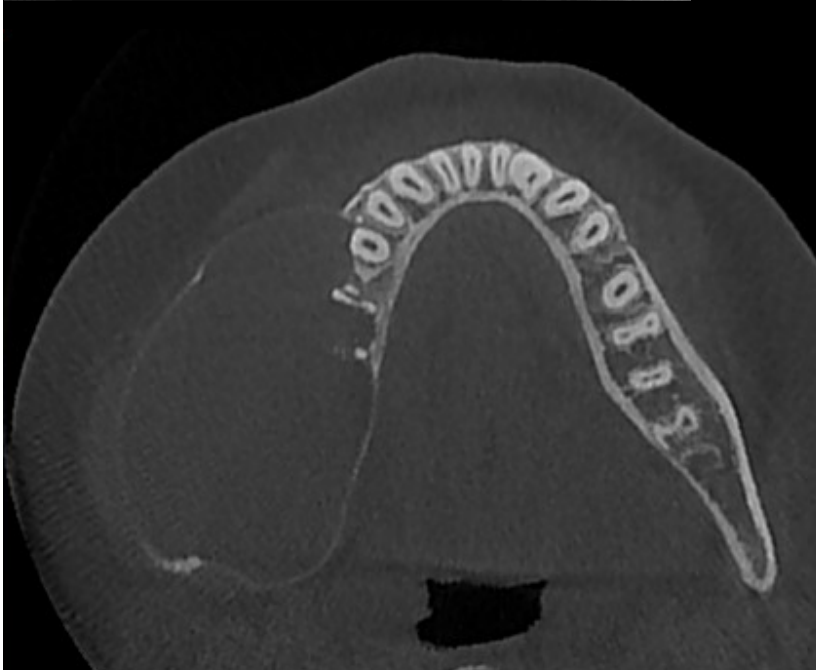


IRM

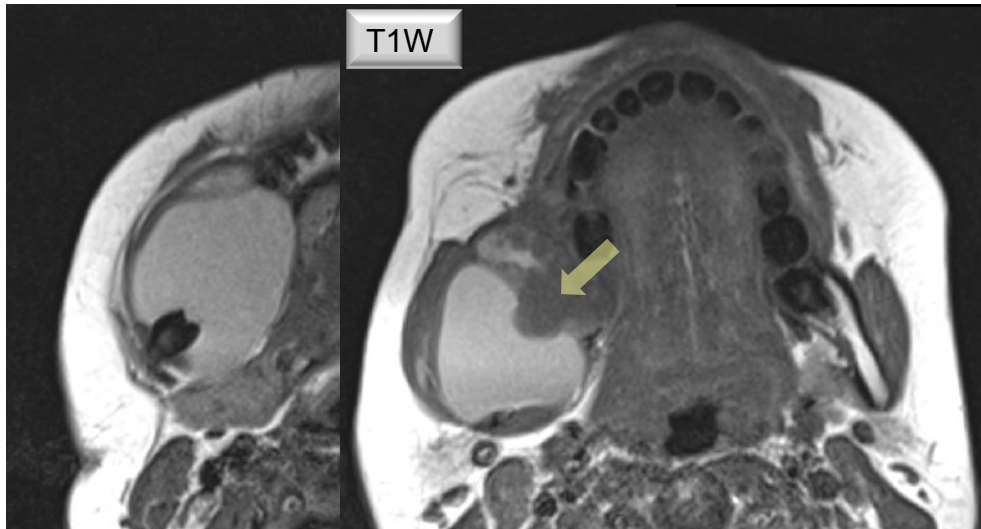




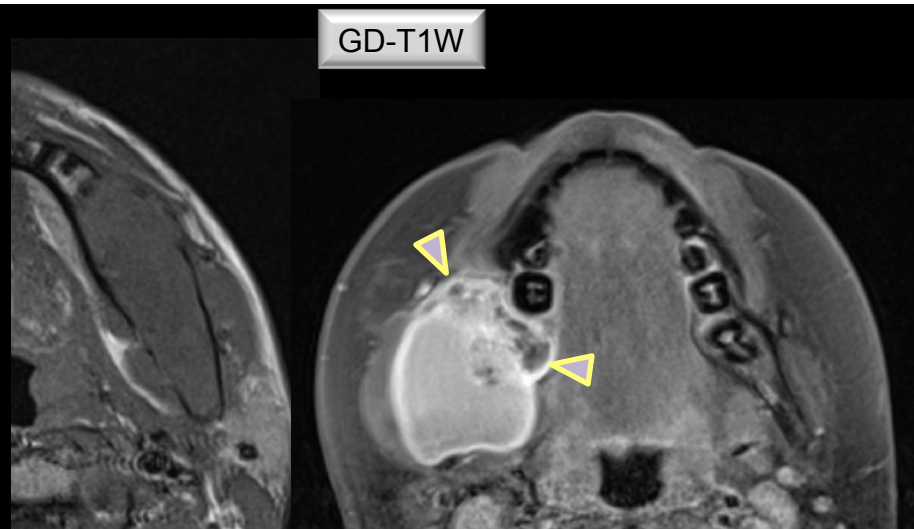




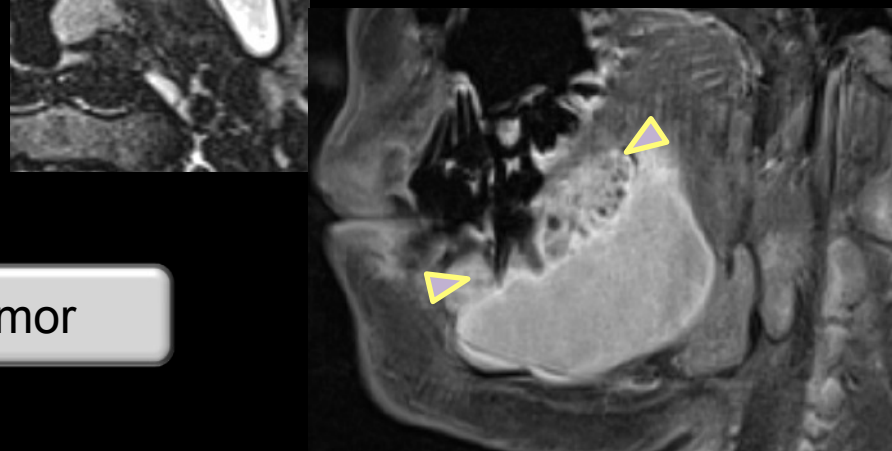
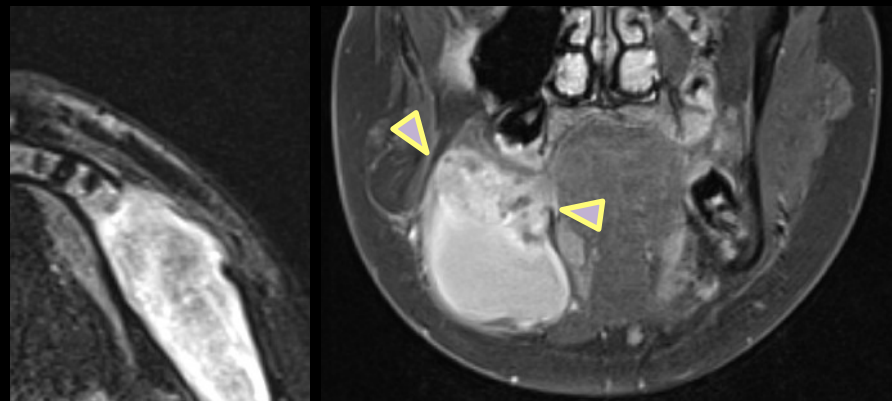
T1W



GD-T1W



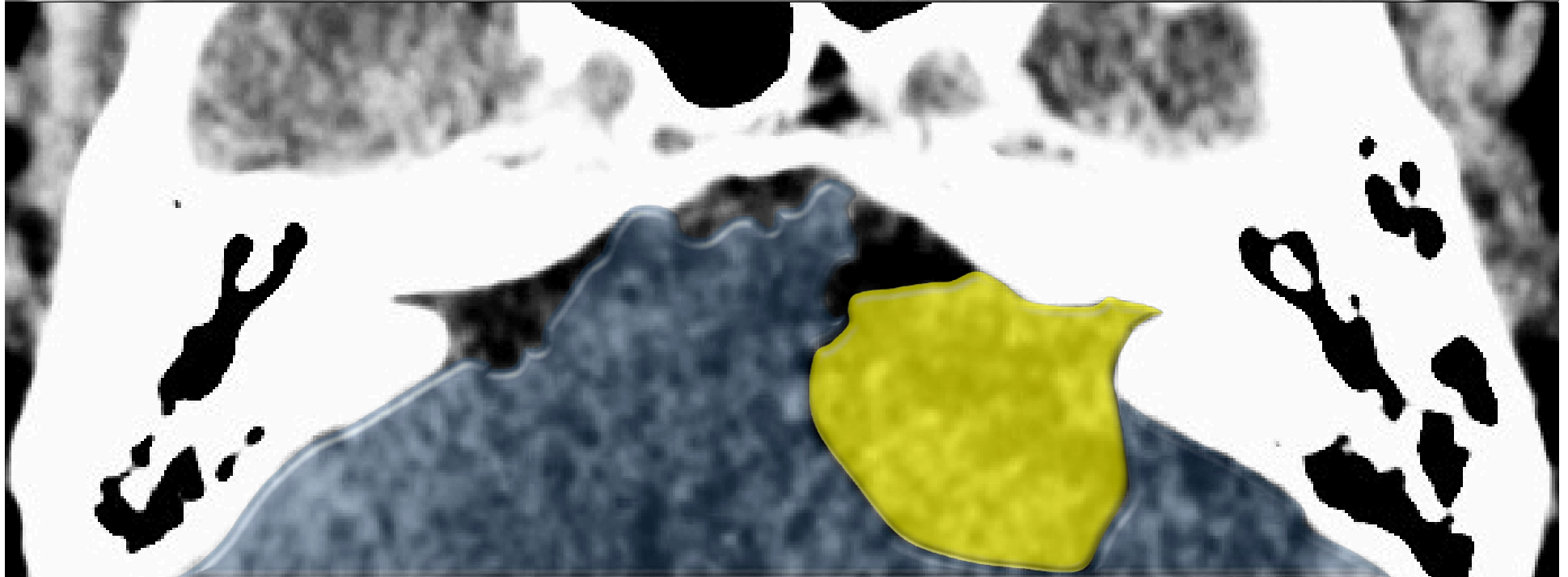
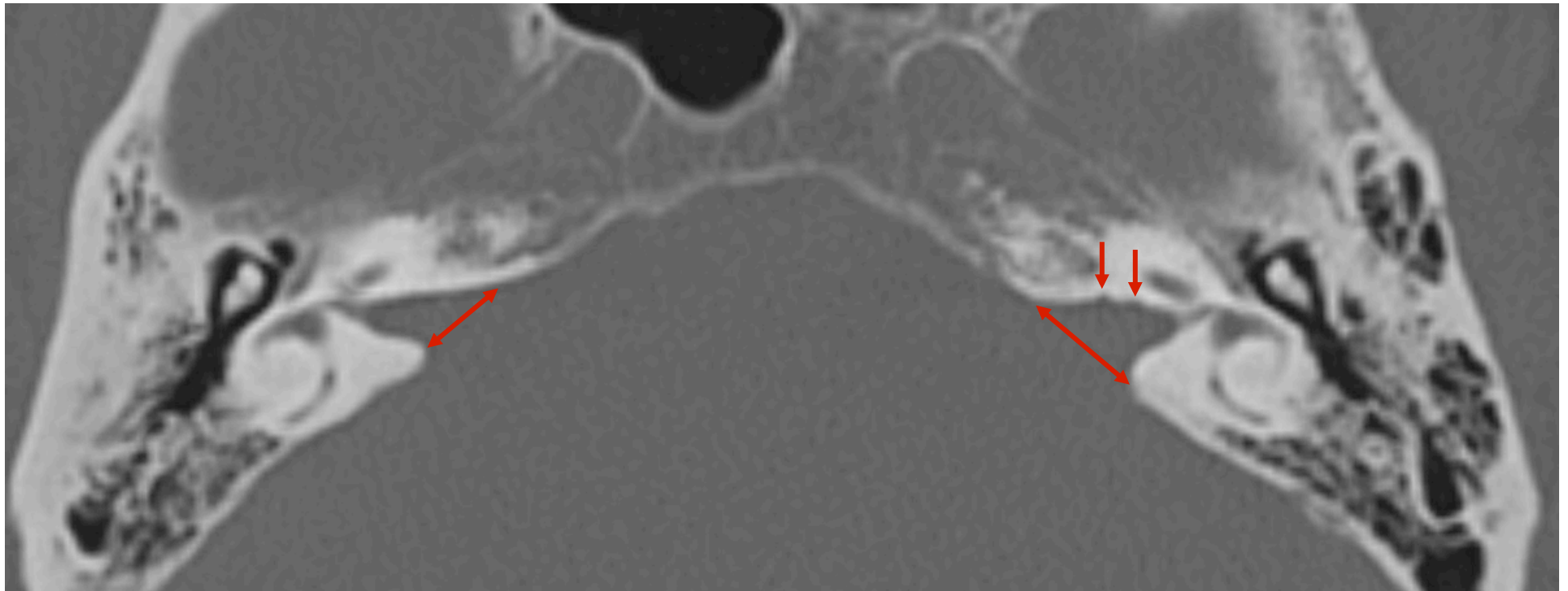
T2W FS



Benign odontogenic tumor



Benign odontogenic tumor



Résolution Temporelle

CT-Scan

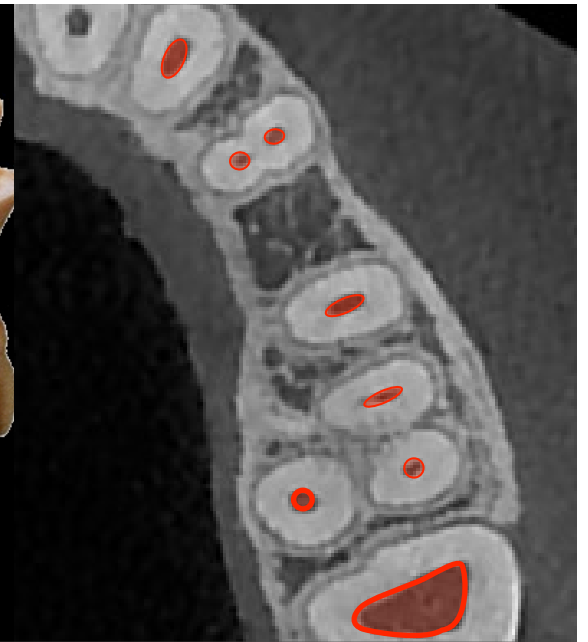
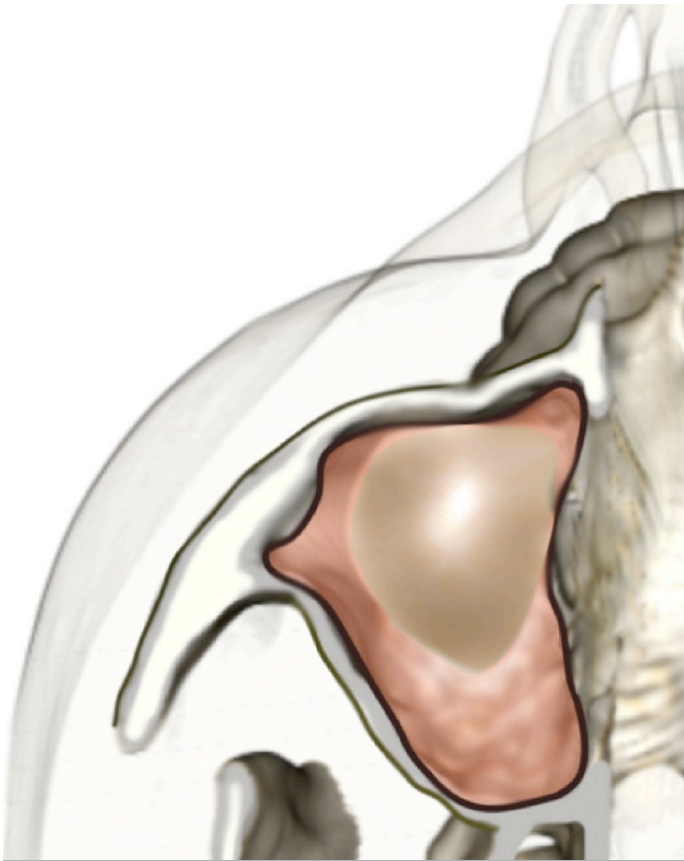


10 - 15 s

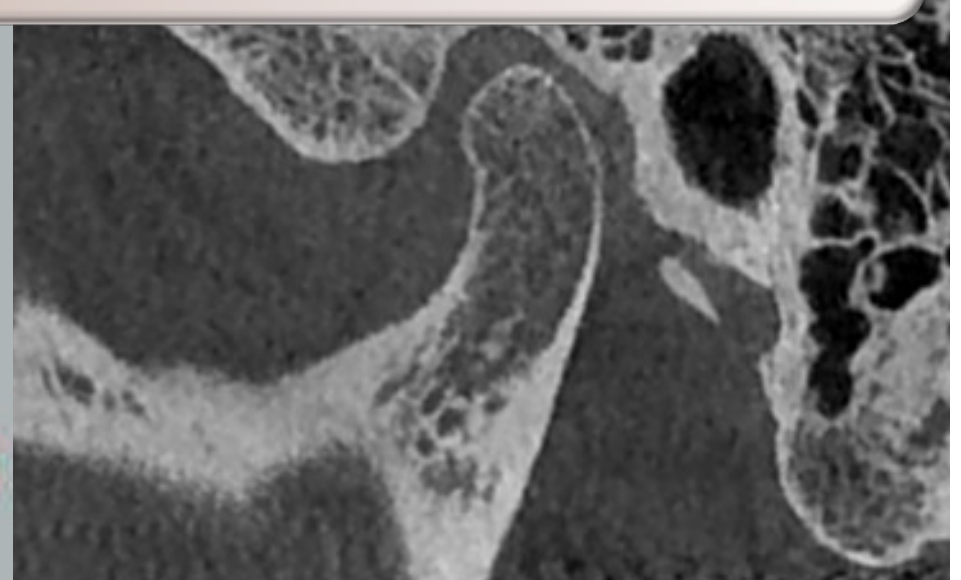
CBCT



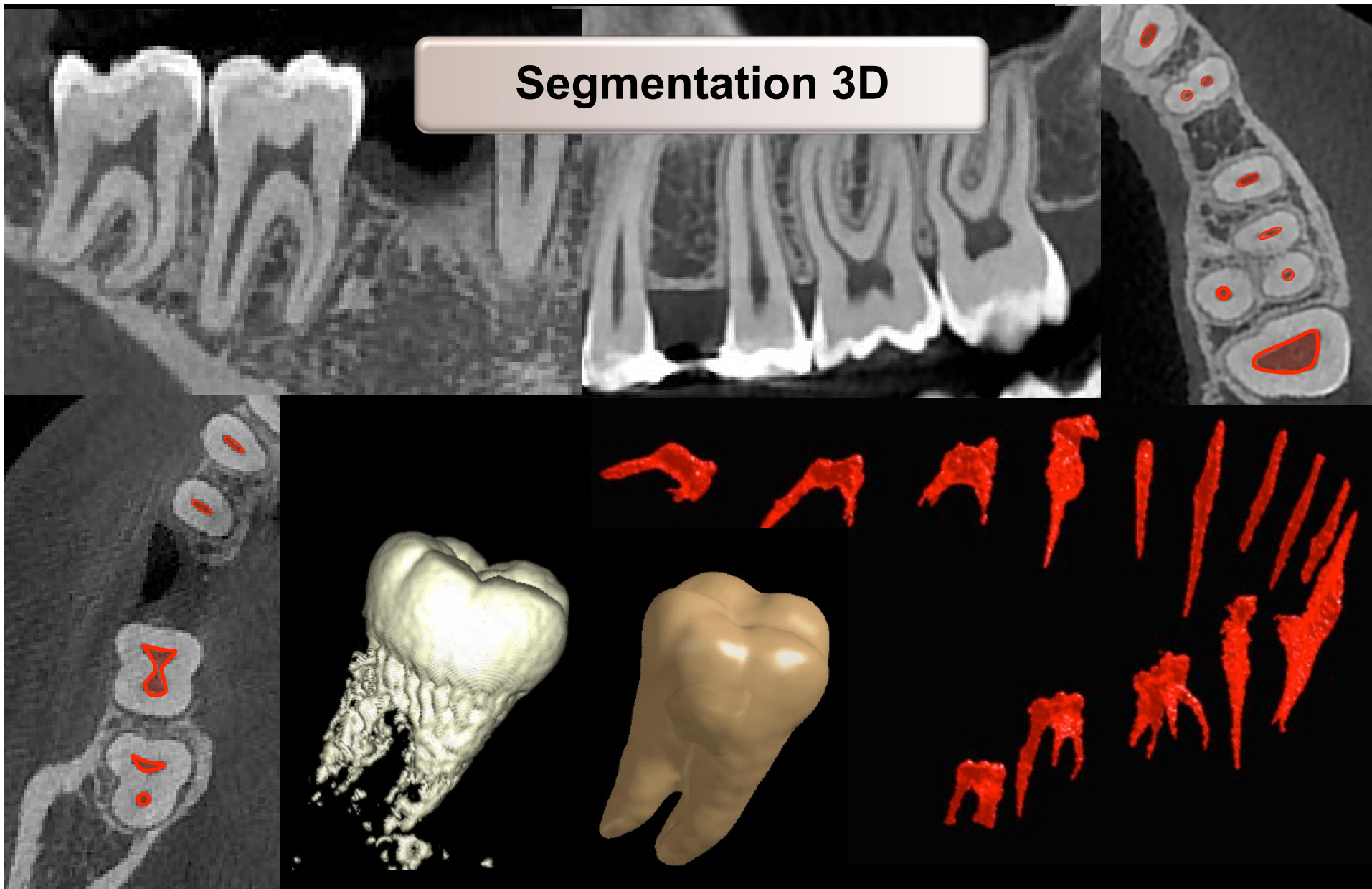
18 - 26 s



Perspectives en imagerie Cone beam CT



Segmentation 3D



3D modeling and printing

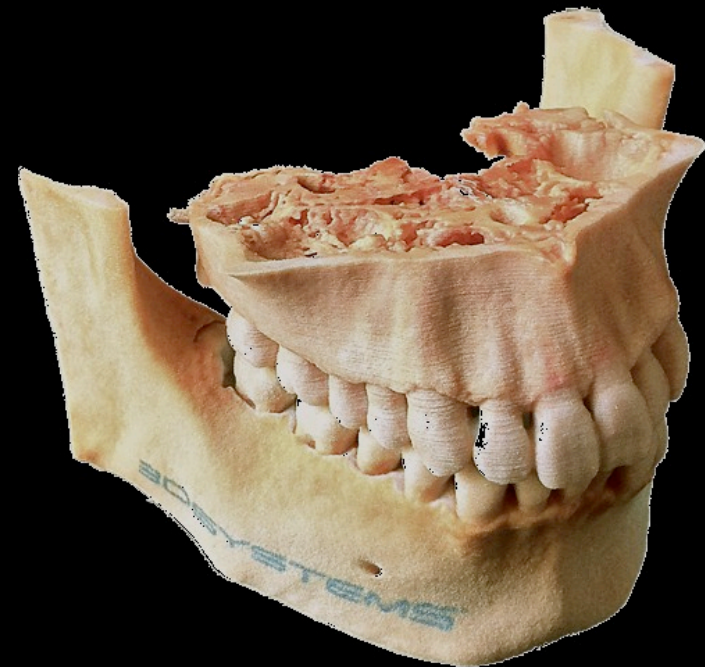
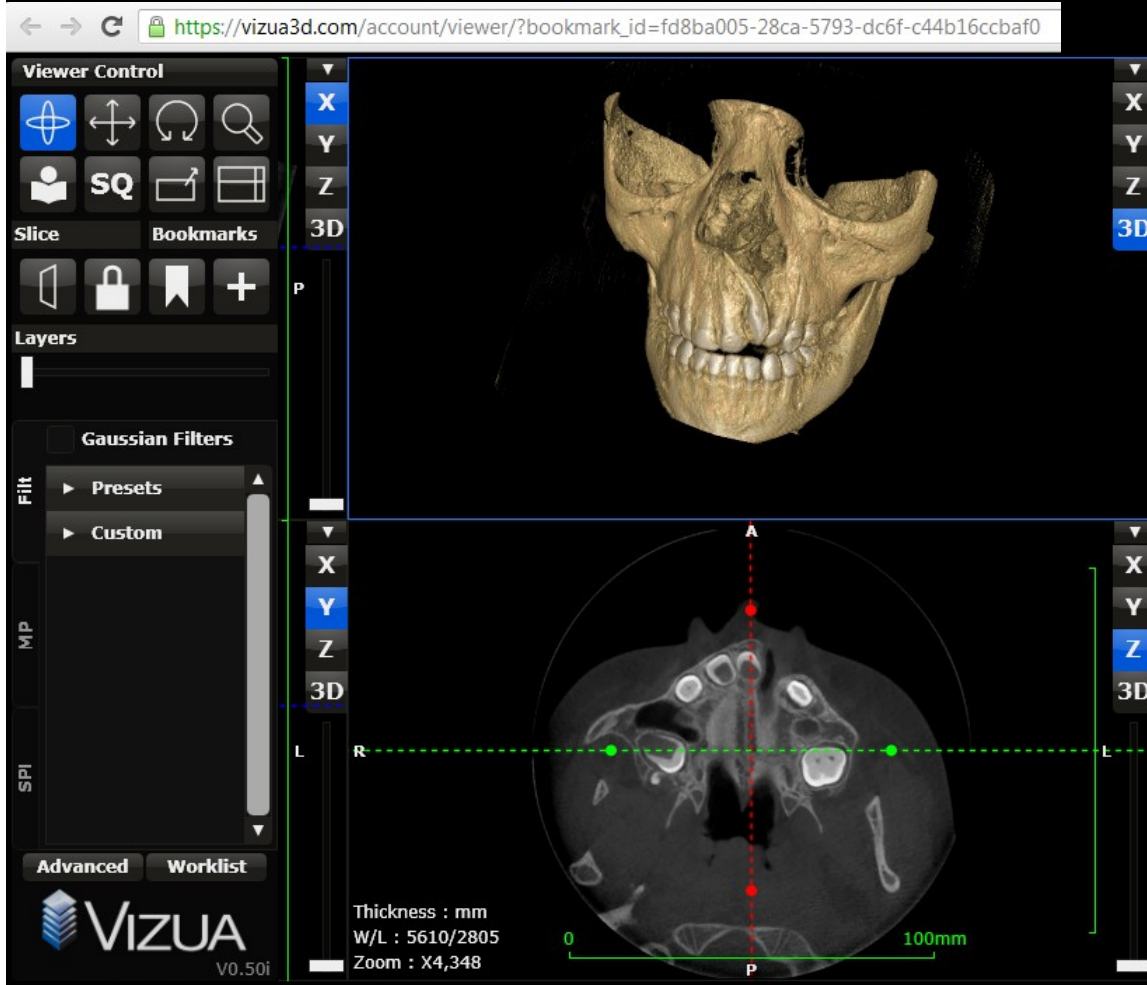
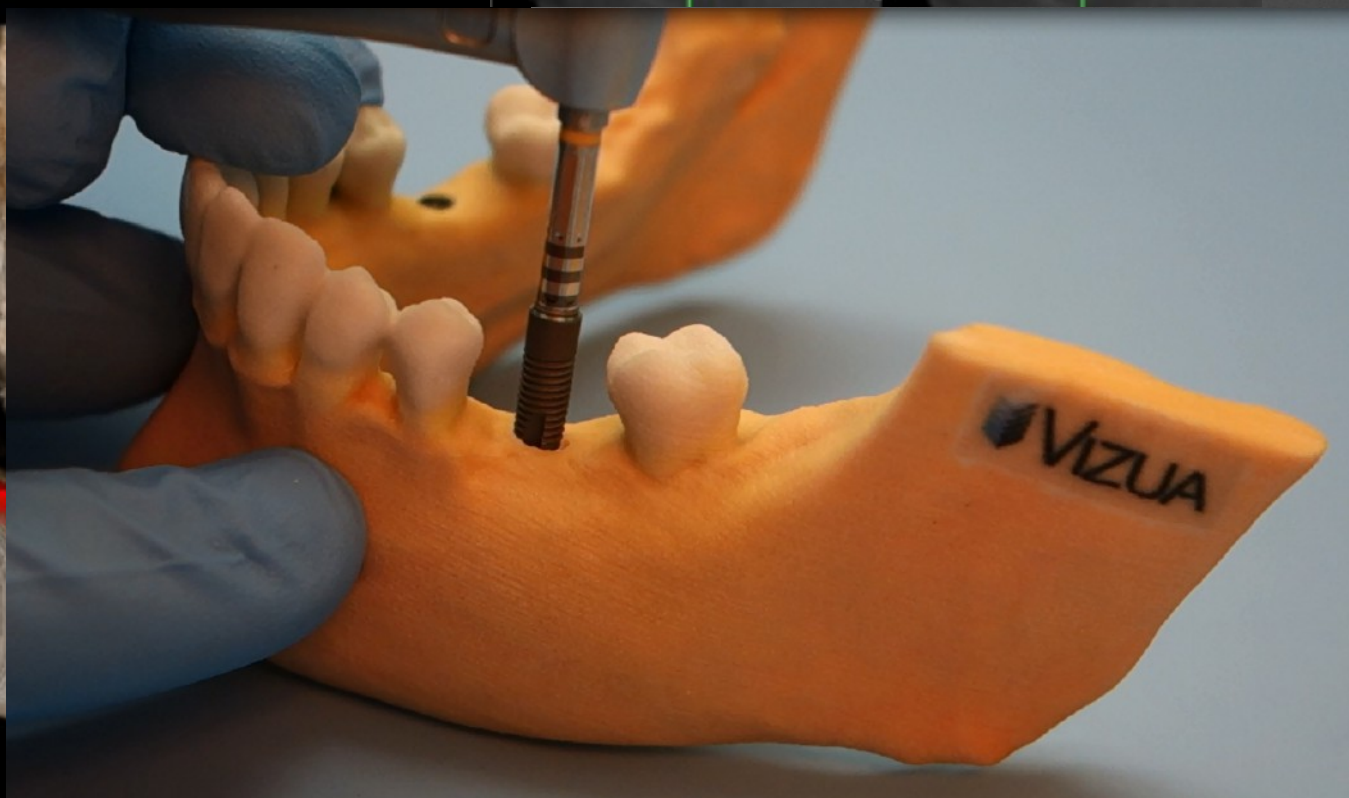
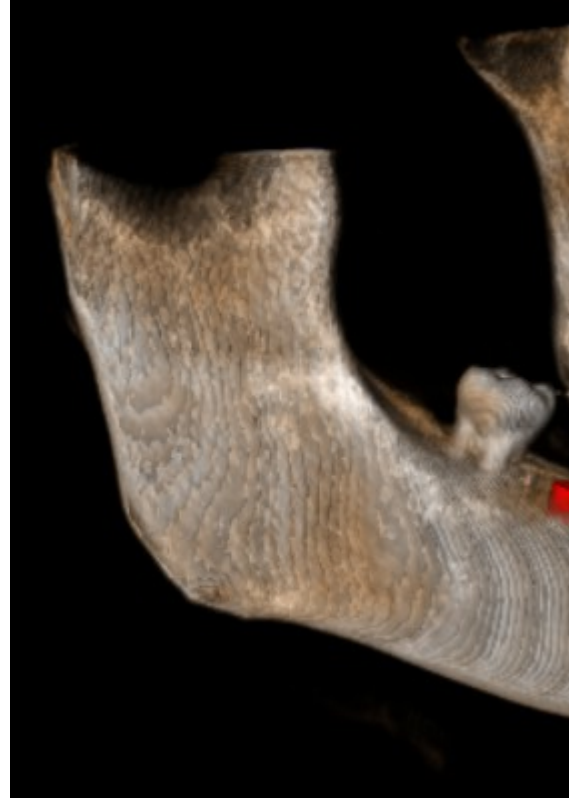
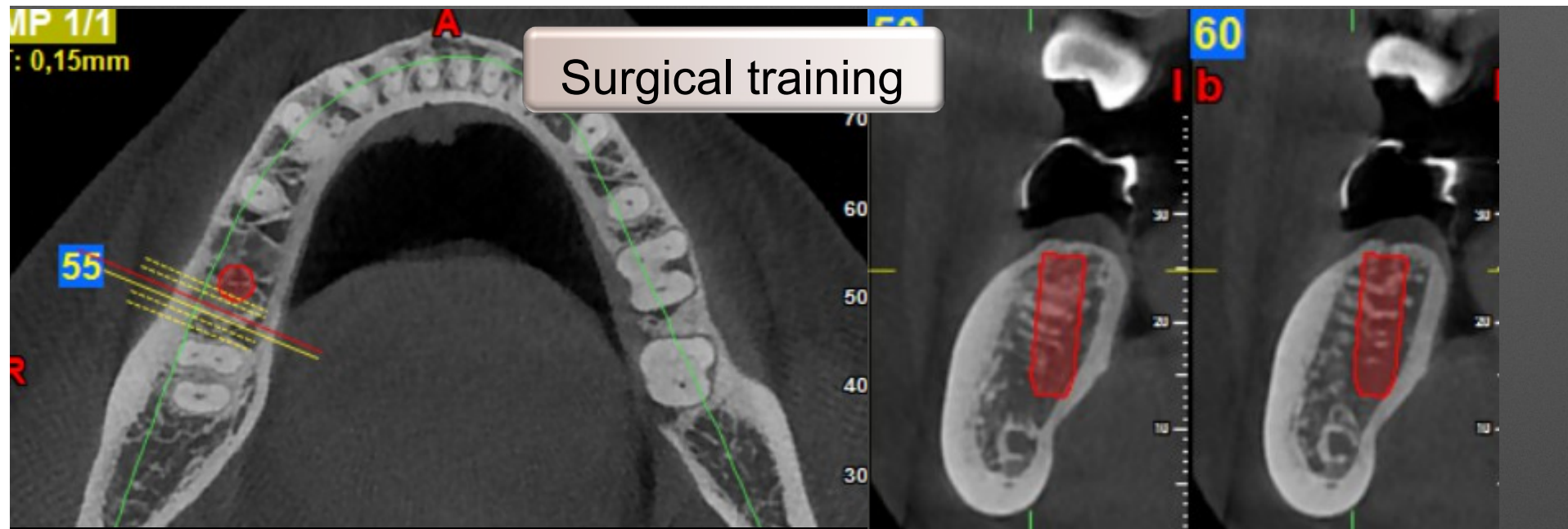
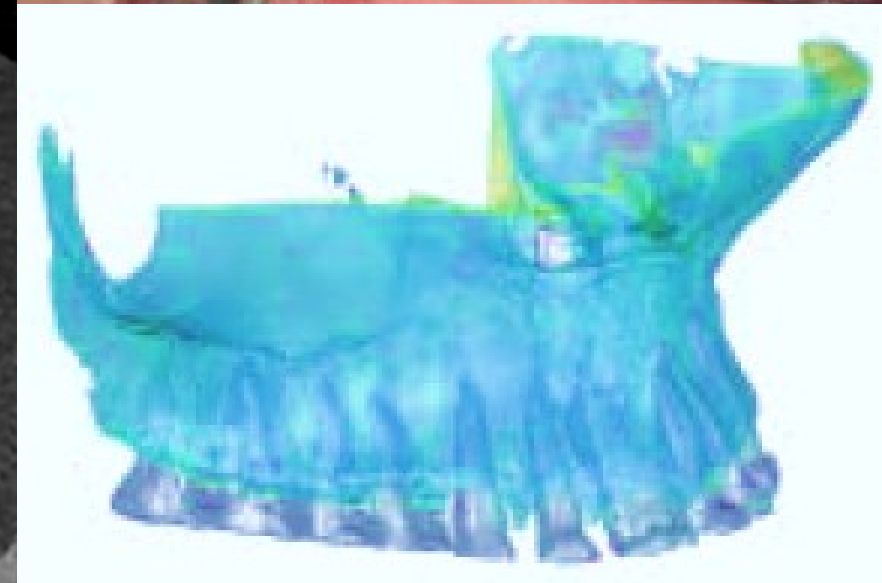
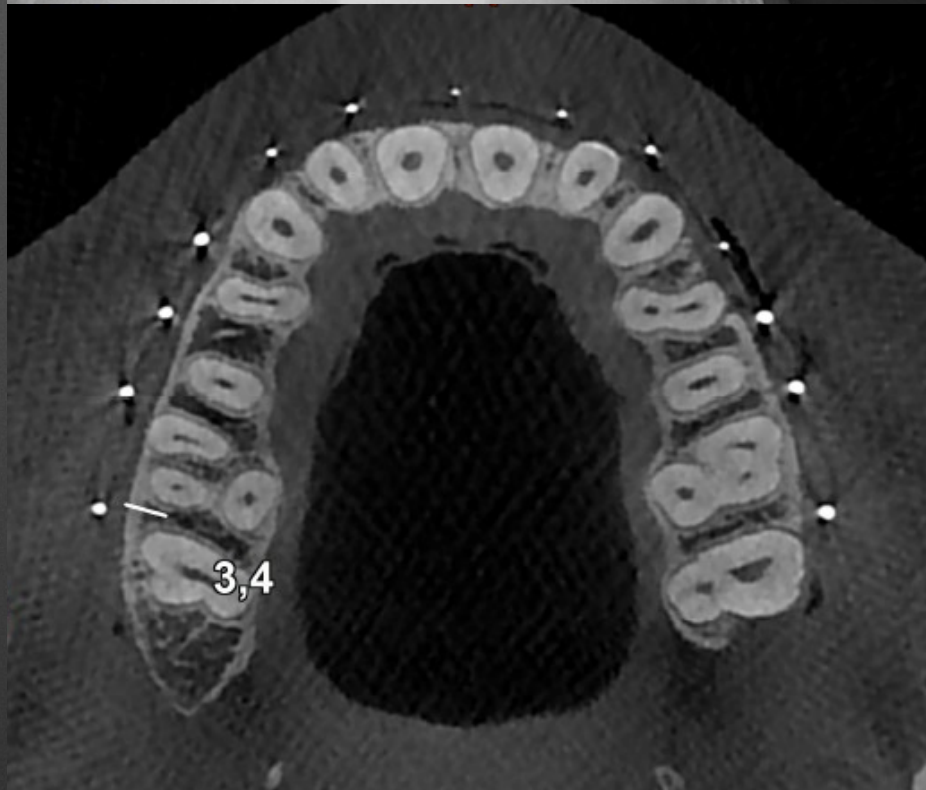
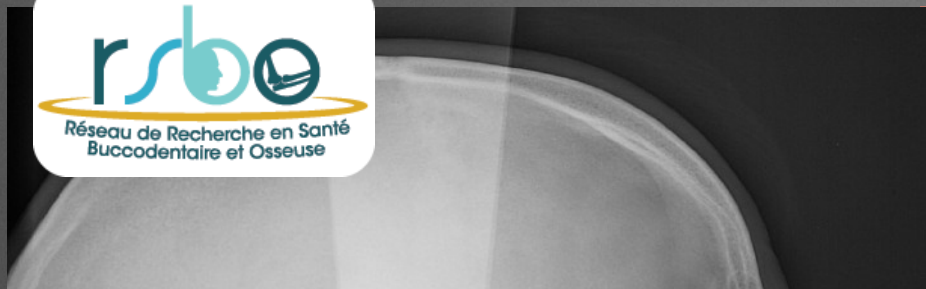


Plate-forme 3D

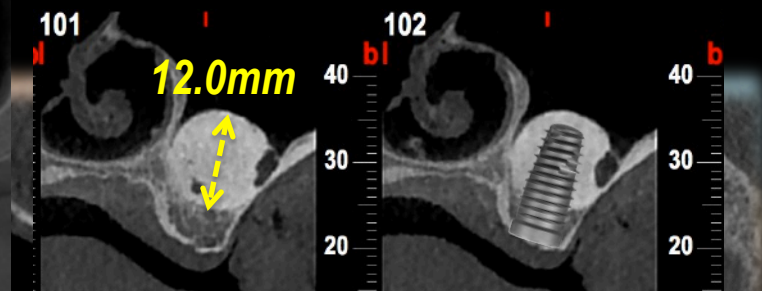
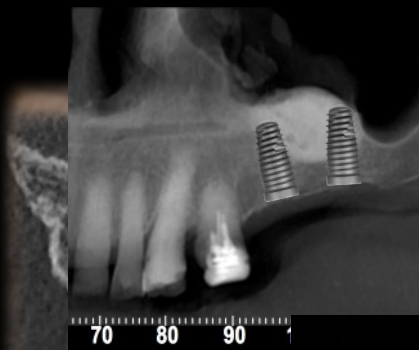
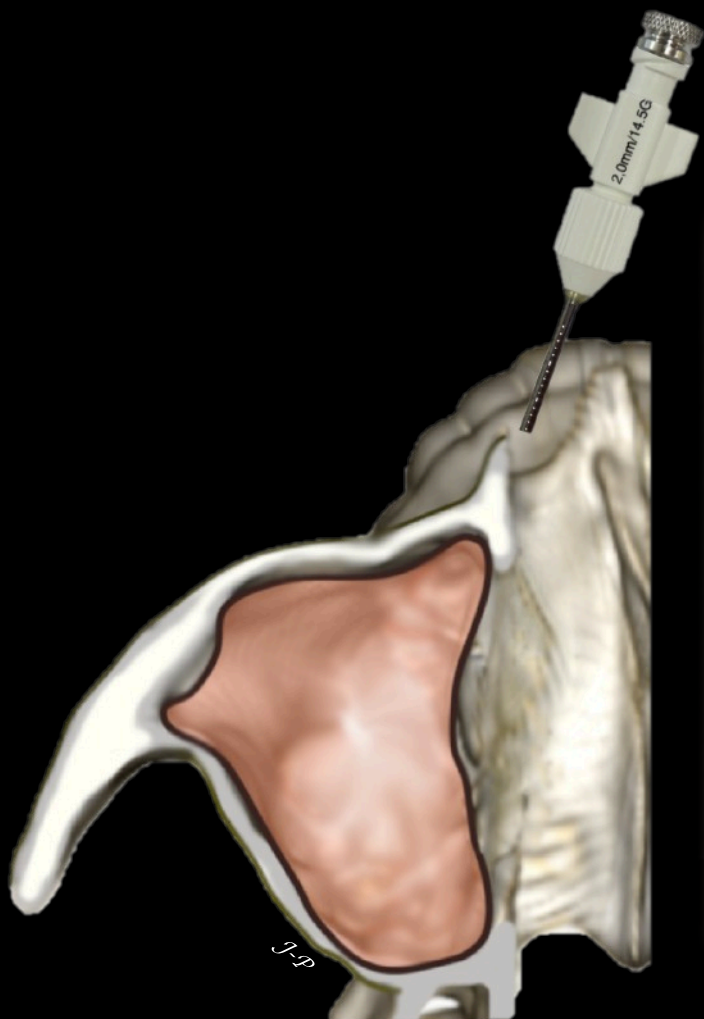






*Orthodontic treatment accelerated
by guided surgery using piezocision technique*

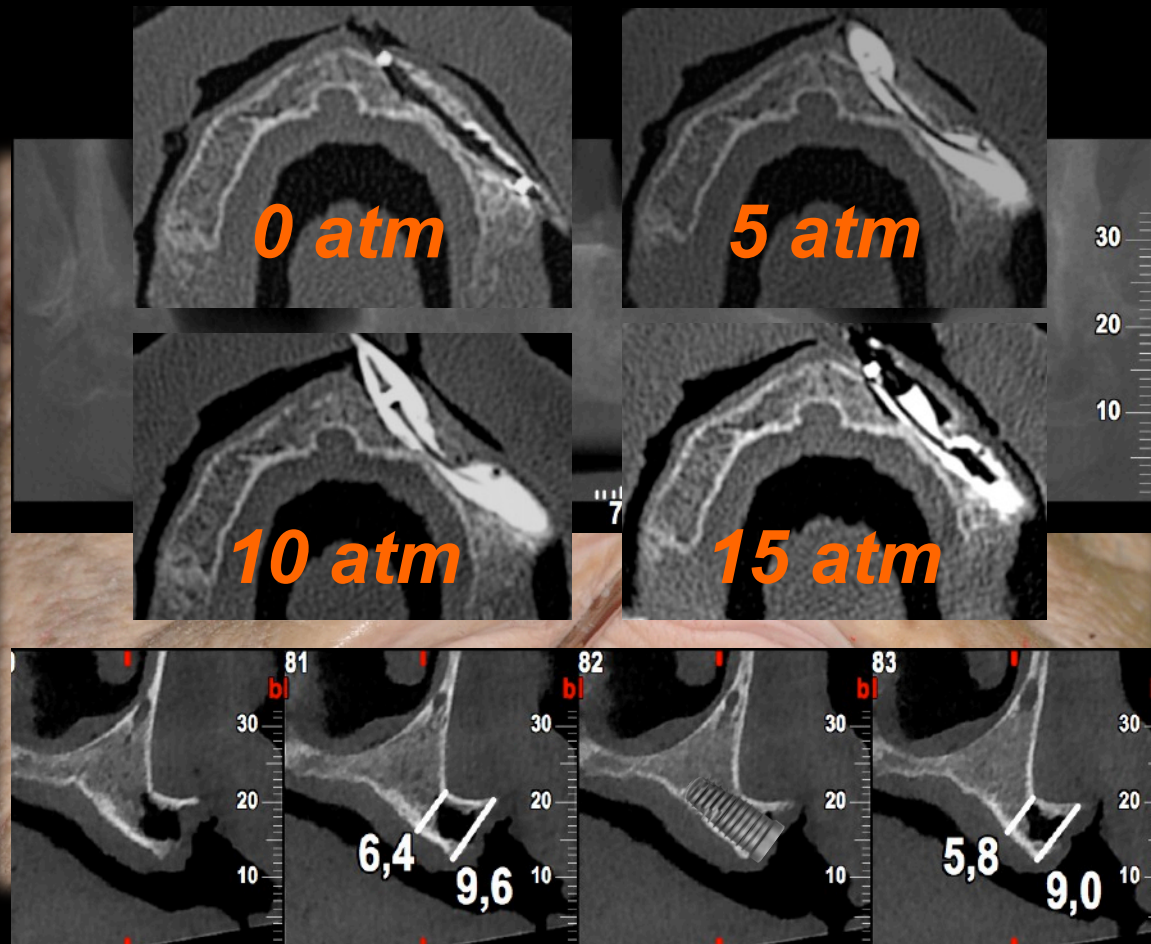
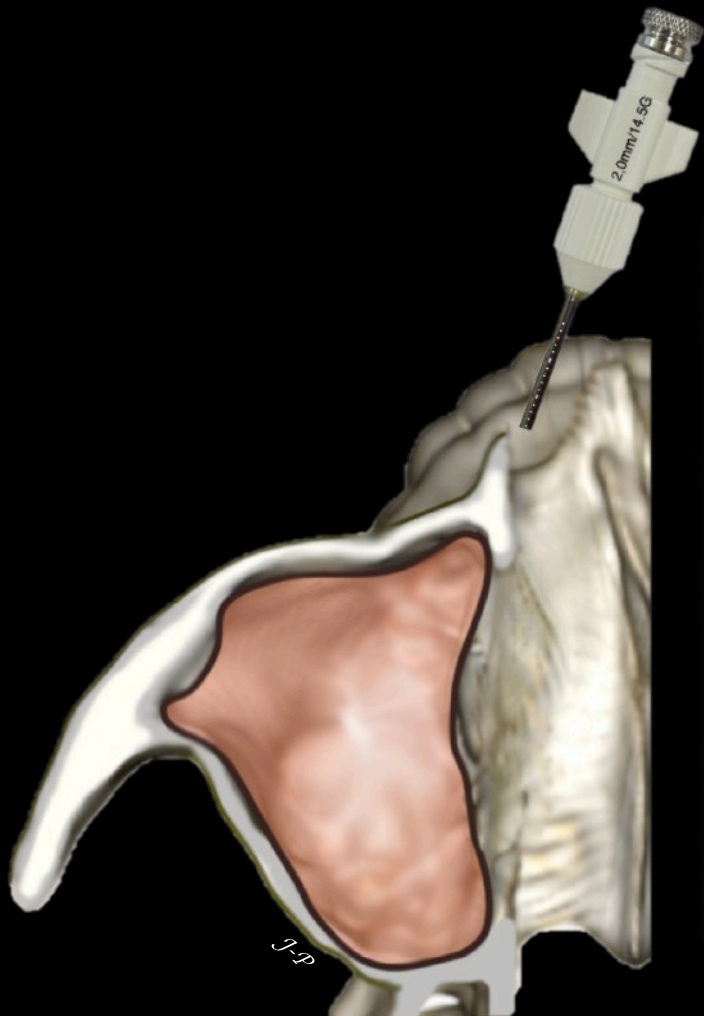
Sinus lift



Radiological sinus lift: a new minimally invasive CT-guided procedure to maxillary sinus floor elevation in implant dentistry.

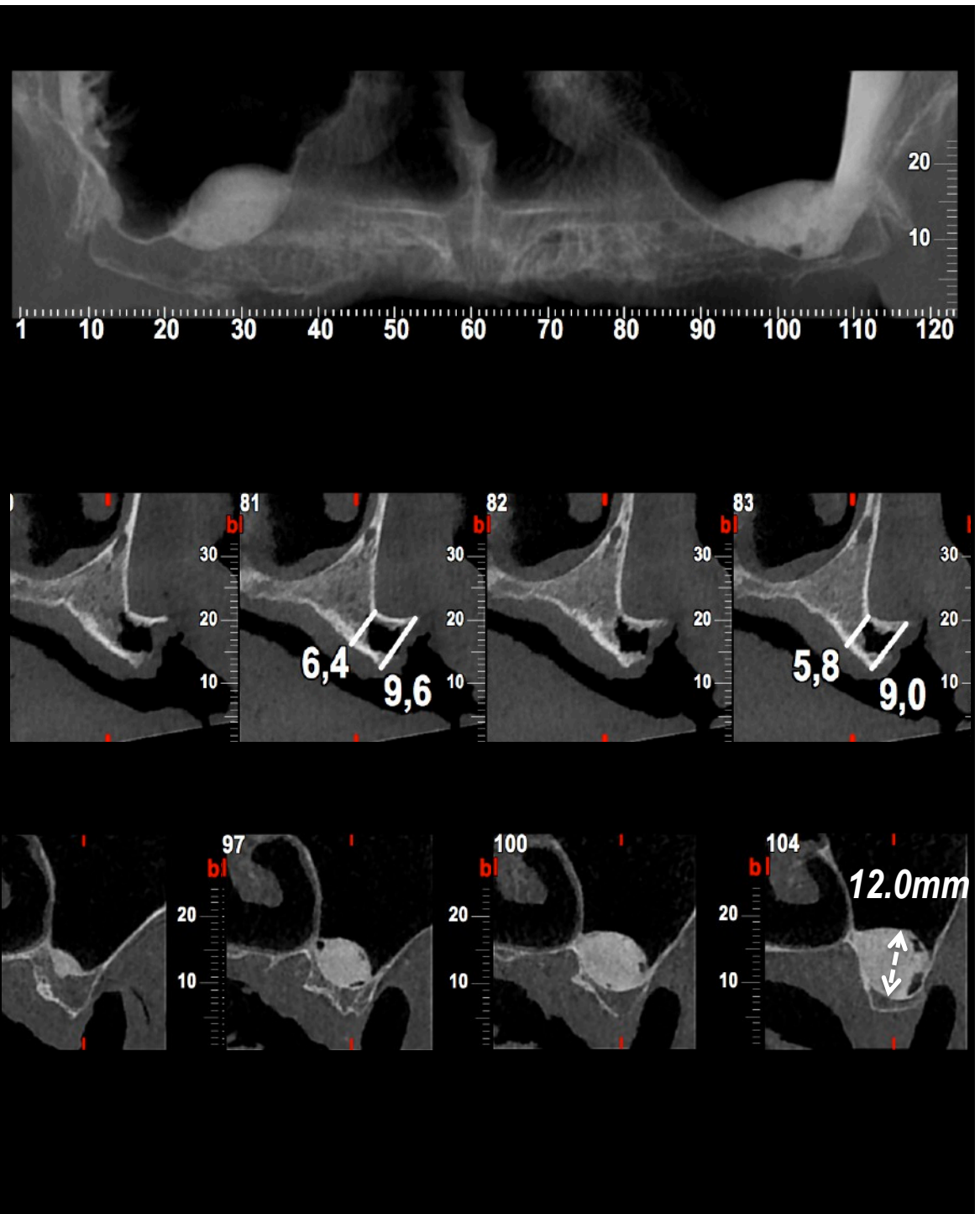
JF MATERN, T BRIDONNEAU, P KELLER, et al.
Clin Oral Implants Res. 2015

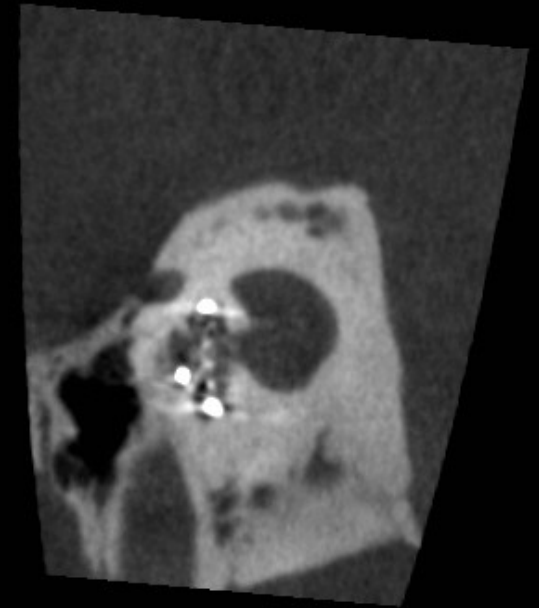
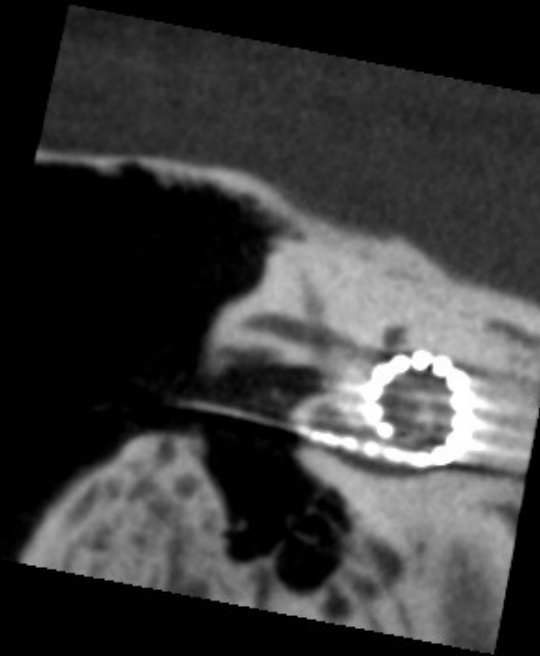
Ridge expansion



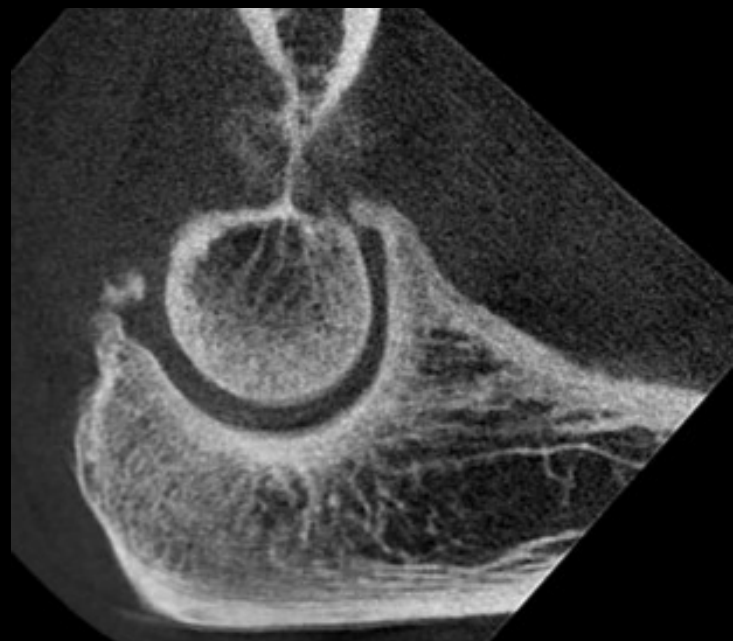
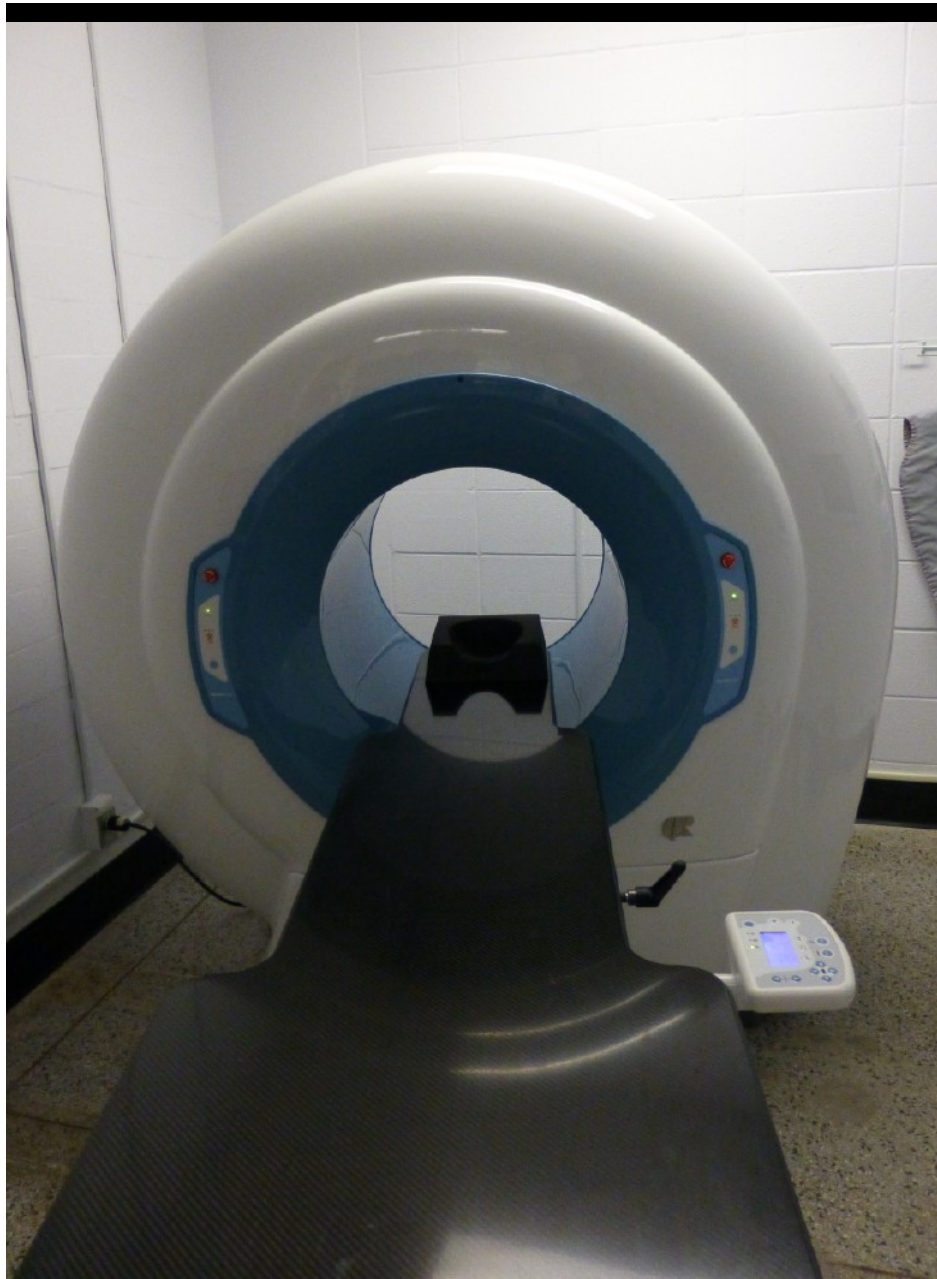
Radiological sinus lift: a new minimally invasive CT-guided procedure to maxillary sinus floor elevation in implant dentistry.

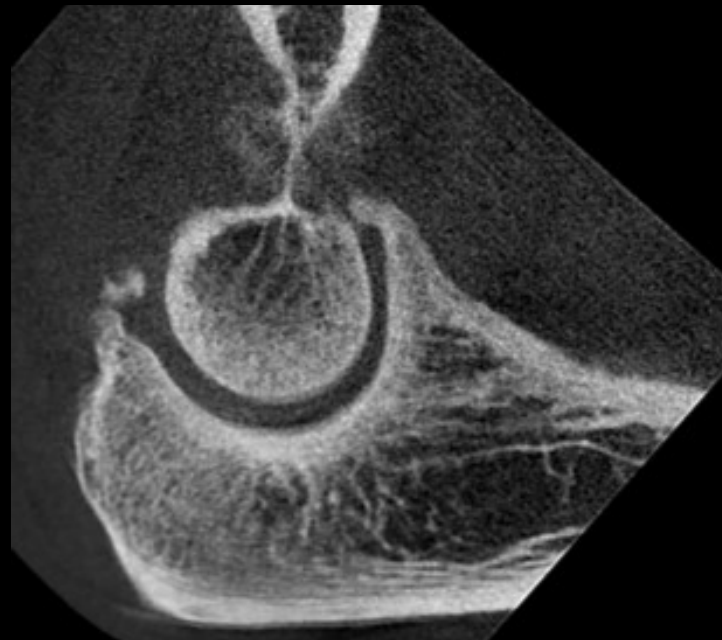
JF MATERN, T BRIDONNEAU, P KELLER, et al.
Clin Oral Implants Res. 2015

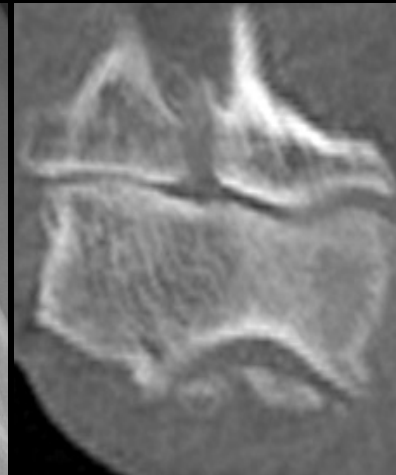
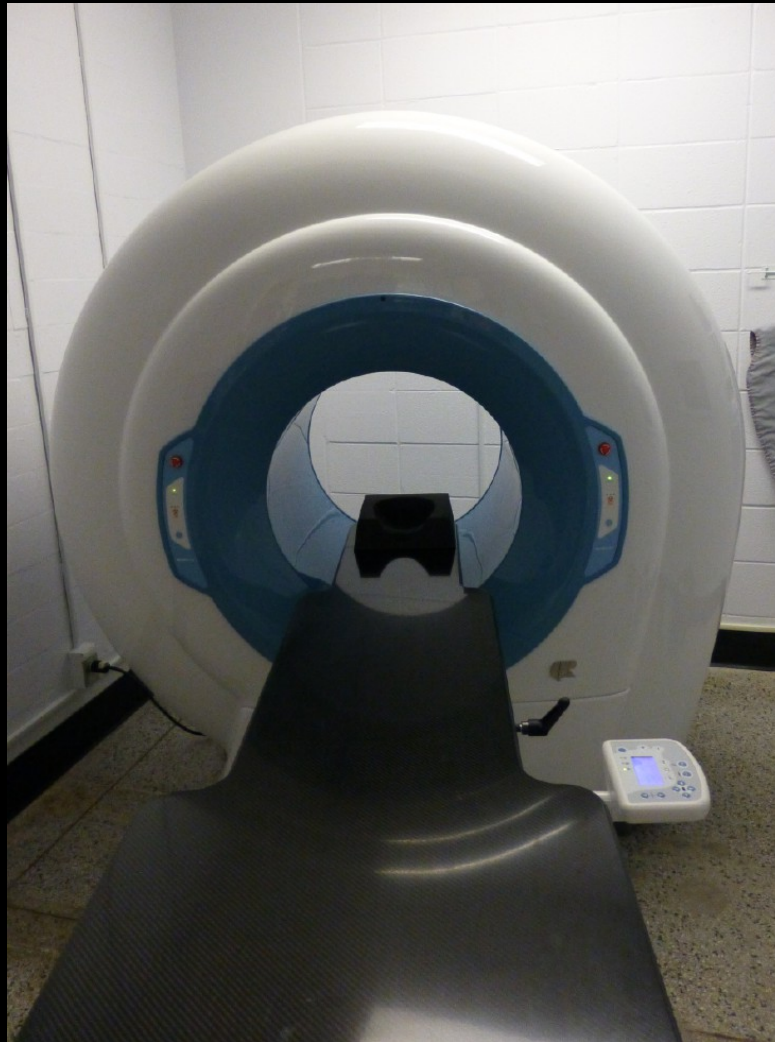




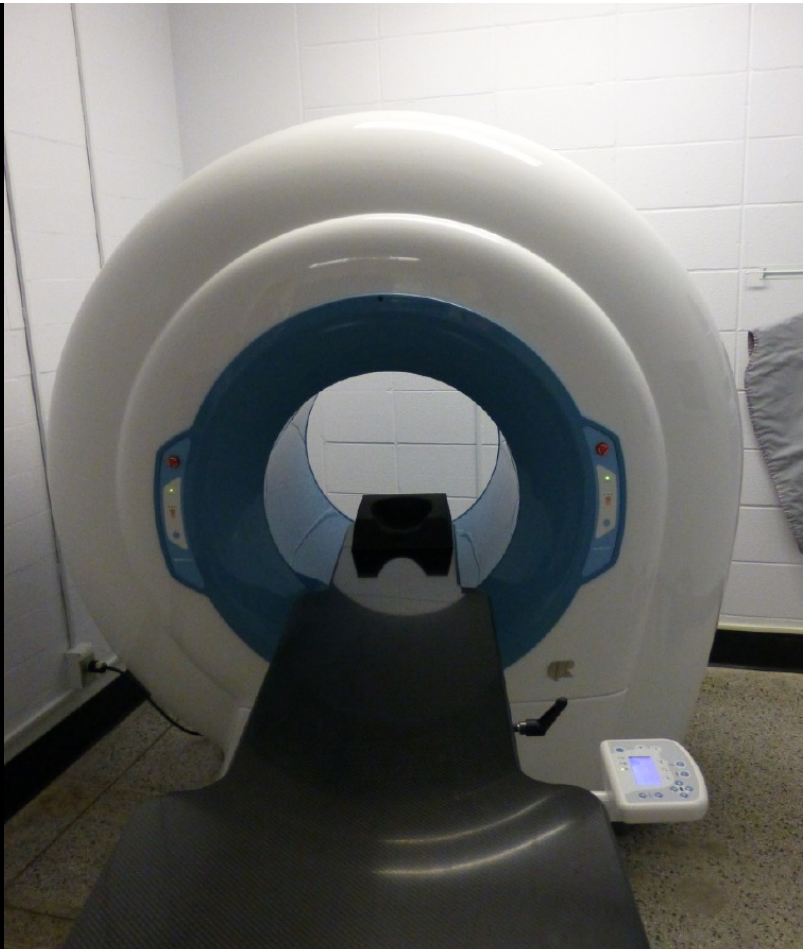
Dr Claude Hodez





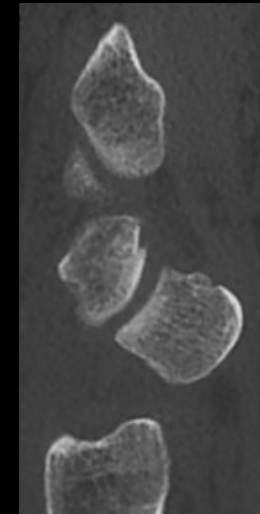
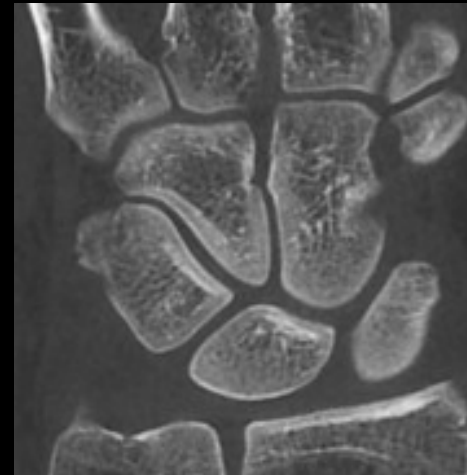


	CBCT	RX/TDM
PDS	265.19	191.56
PDL	16.73	104.60



Skeletal Radiol (2012) 41:963–969

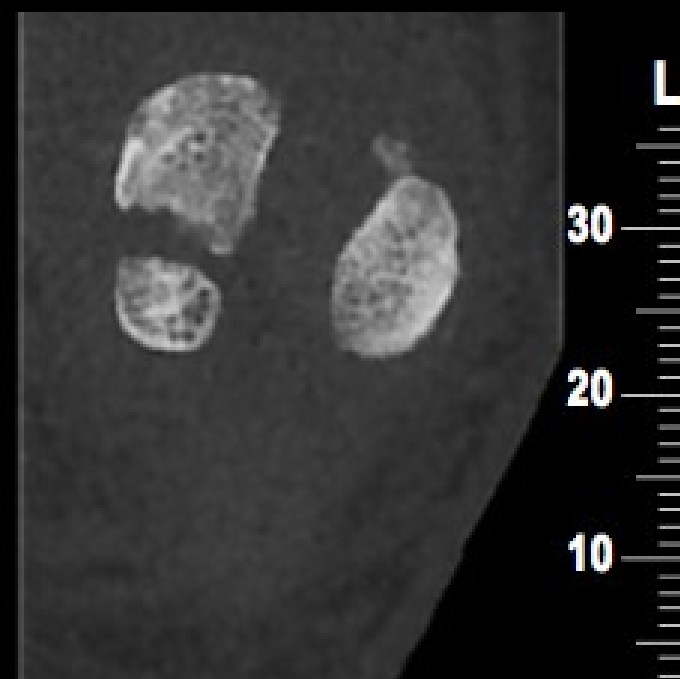
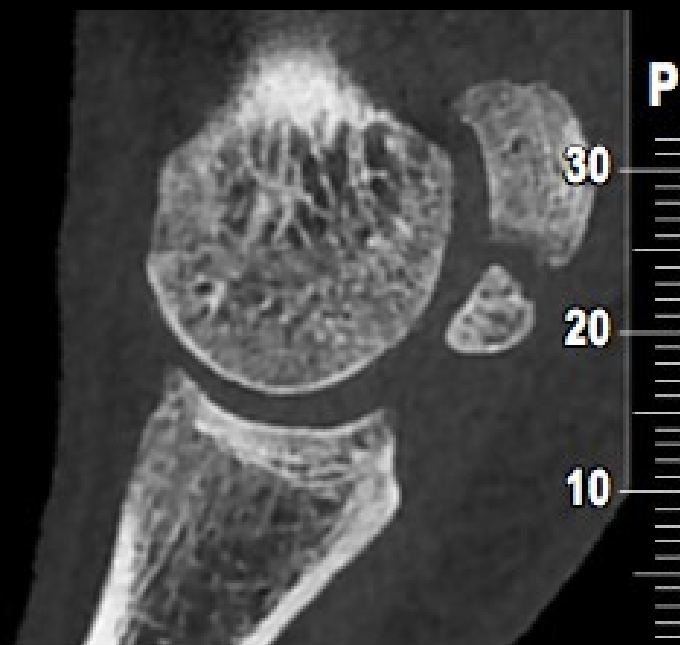
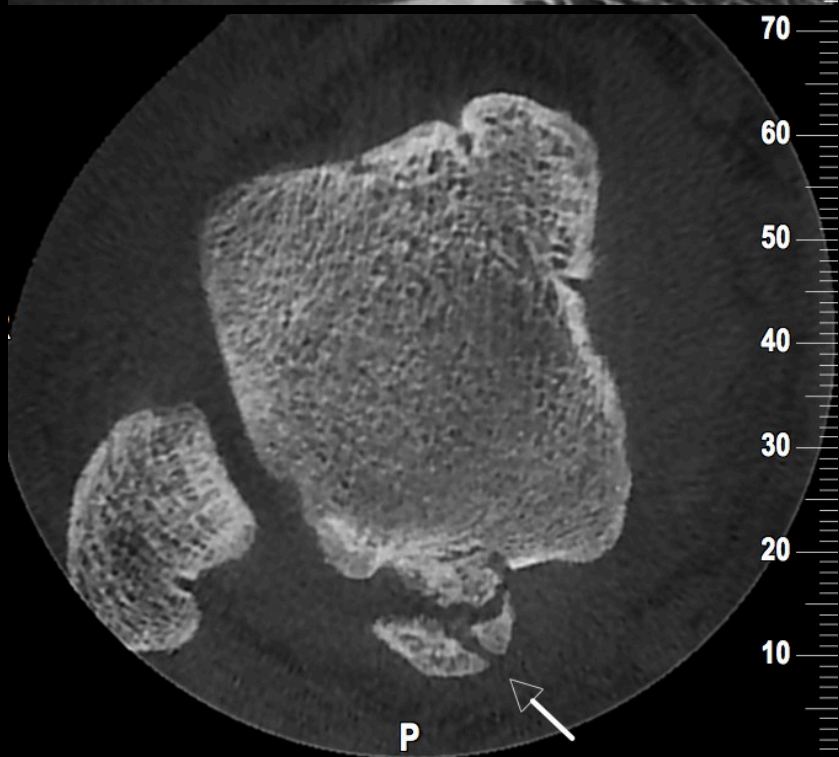
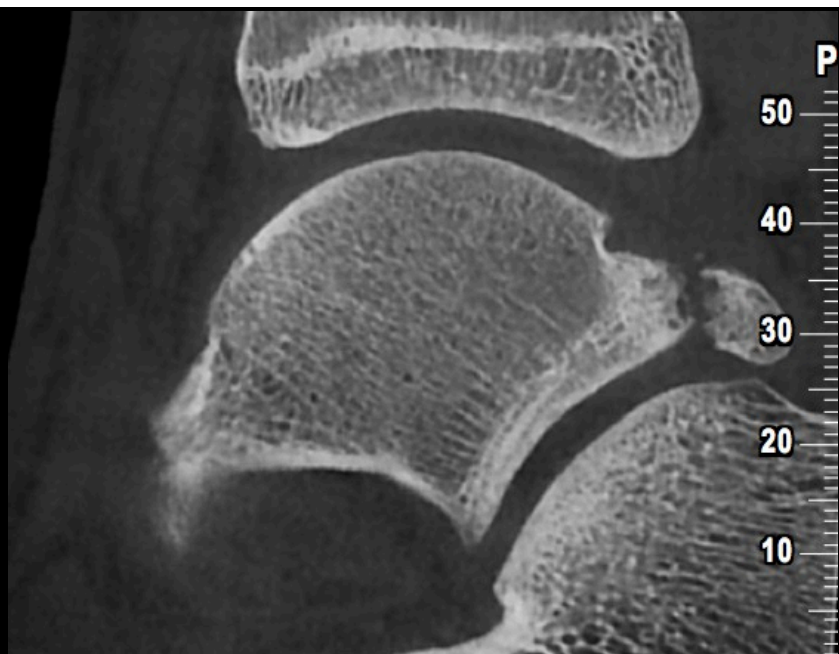
DOI 10.1007/s00256-011-1305-1

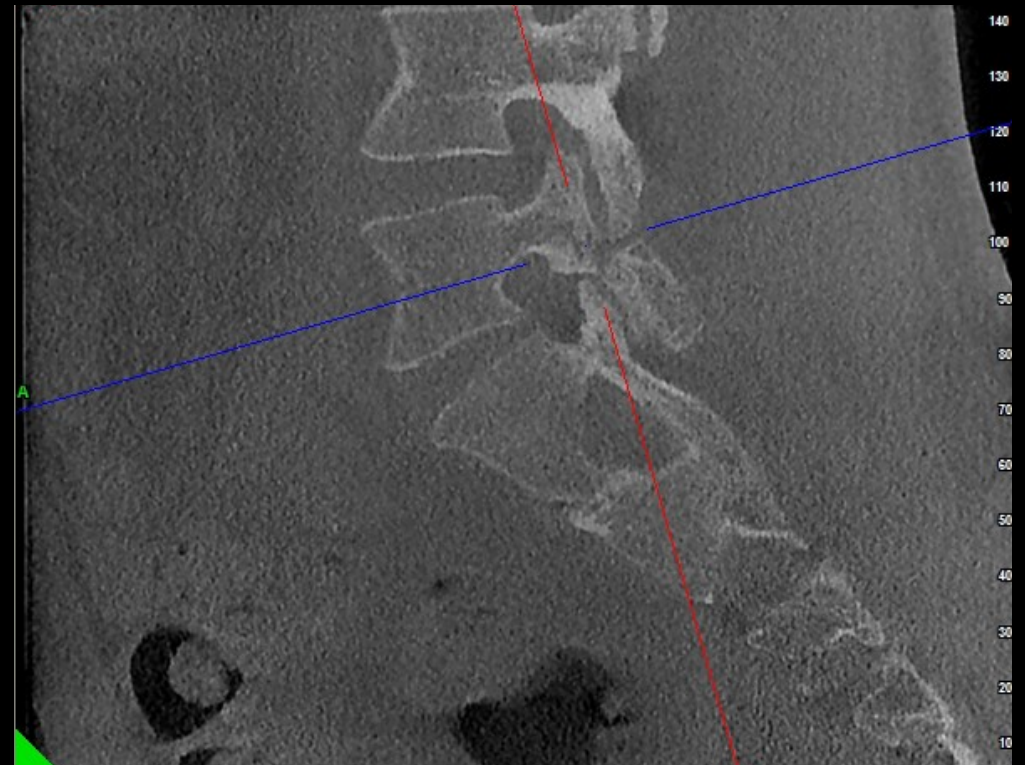
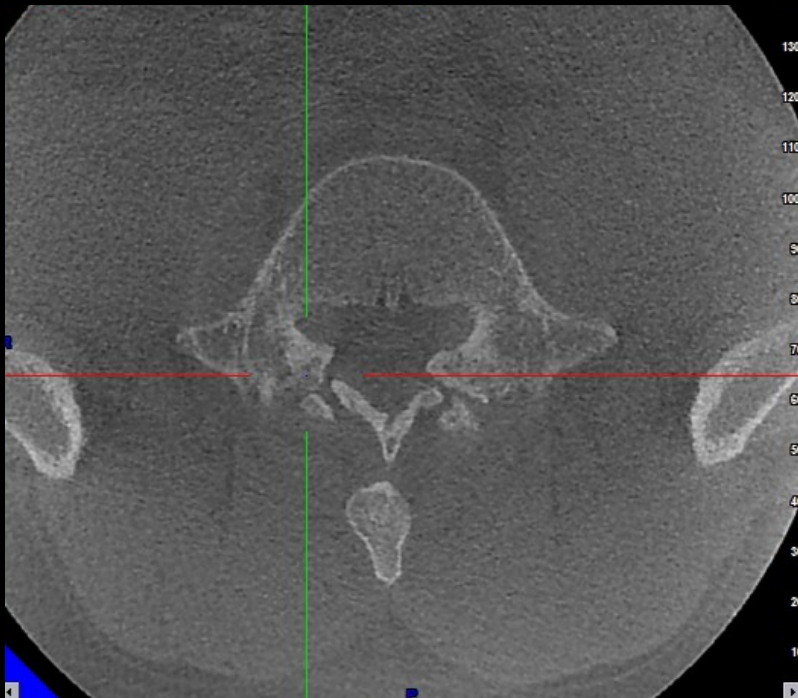


SCIENTIFIC ARTICLE

Cone-beam computed tomography arthrography: an innovative modality for the evaluation of wrist ligament and cartilage injuries

Reeta Ramdhian-Wihlm • Jean-Marie Le Minor • Matthieu Schmittbuhl •
Jeremy Jeantroux • Peter Mac Mahon • Francis Veillon • Jean-Claude Dosch •
Jean-Louis Dietemann • Guillaume Bierry





PDS : 5760mGy.cm²

Combination of CBCT and Biplanar X-Ray imaging

