

Peter Schutz *Kuwait university*

Ivo Klepáček *First Faculty of Medicine*

- Rozdíly týkající se zlomenin mezi mandibulou a střední částí obličejového skeletu
- Mechanismus traumatu
- Četnost druhů zlomenin
- Predisponovaná místa pro zlomeniny v obličejové části fractures
- Pchirurgický přístup a obvyklý postup úpravy zlomeniny

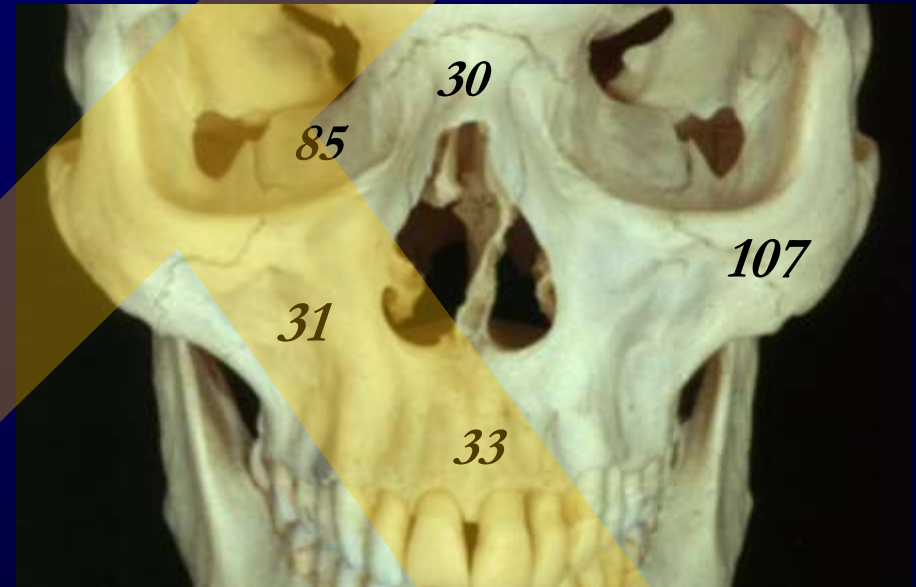
Mandibular fractures

- Condyle 30%
- (Para)symphysis 27%
- Body 17%
- Angle 15%
- Alveol 9%
- Ramus 2%



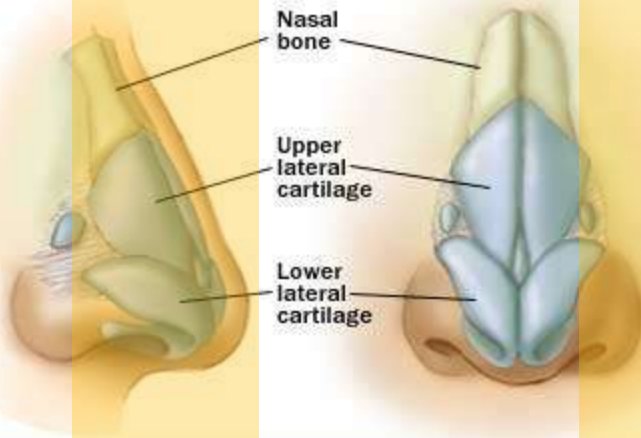
Midface fractures

- ZMC 37%
- Orbit 30%
- Alveolar process 12%
- Maxilla 11%
- Nasal bones 11%



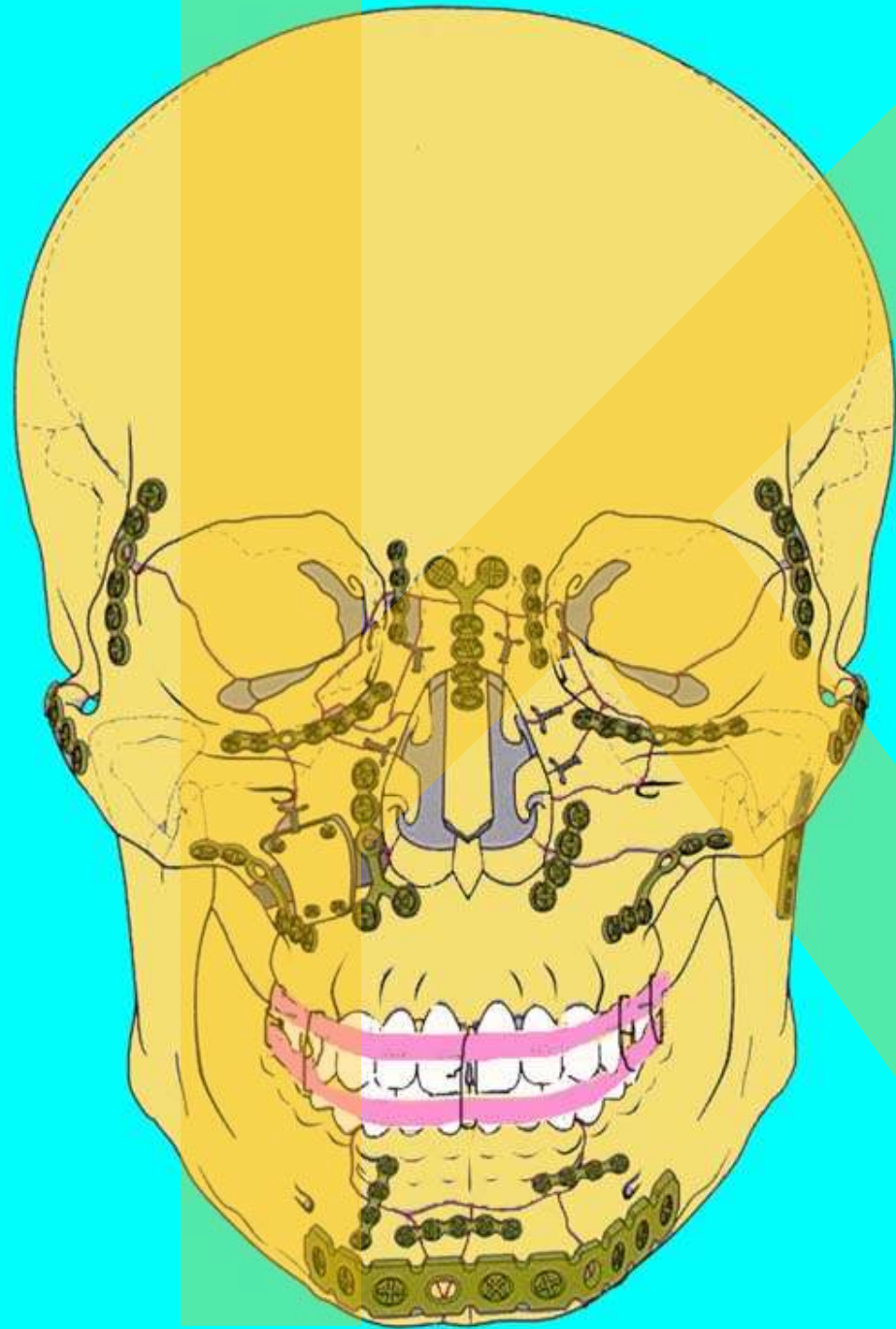
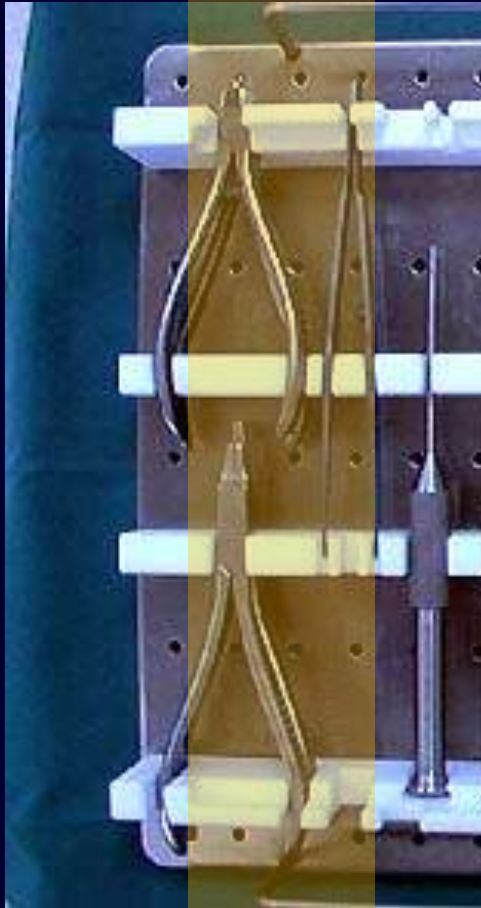
NASAL BONES

Number 1 facial fracture !!



Možnosti léčení obličejových zlomenin

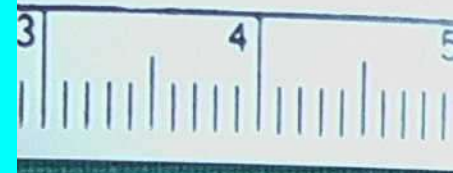
- Pozorování
- Mezičelistní fixace
- Mezičelistní fixace a kostní steh nebo závěs
- Zevní fixátor
- Tahové šrouby
- Mini a mikro destičky
- Kompresivní destičky
- Rekonstrukční dlahy

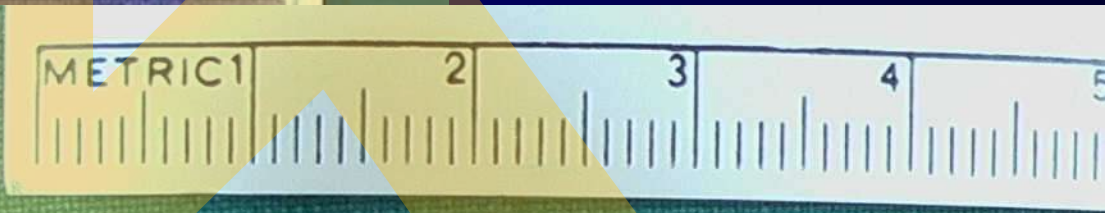
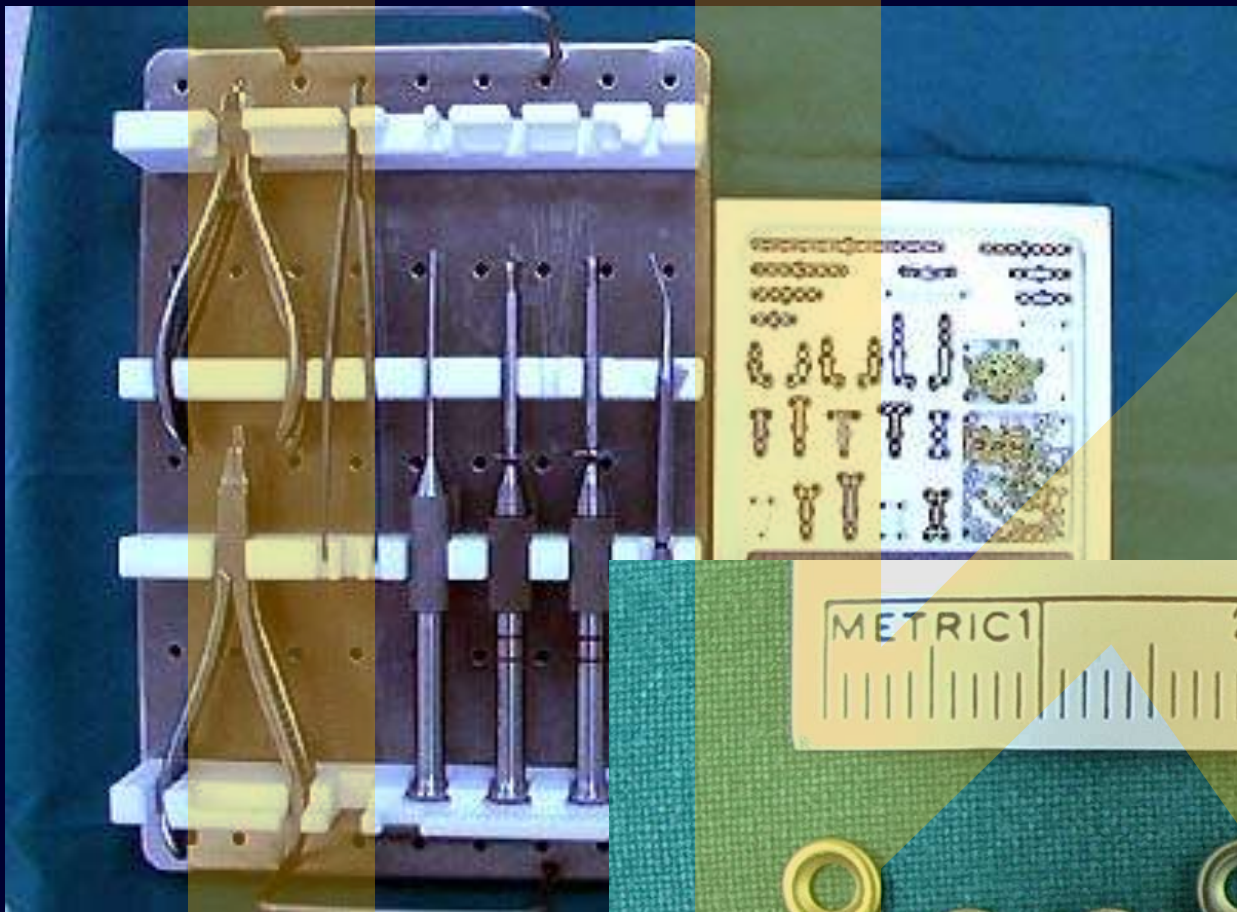


AS A BIOMATERIAL

Corrosion
Carcinogenicity

Strength
Stability - OSTEOINTEGRATION





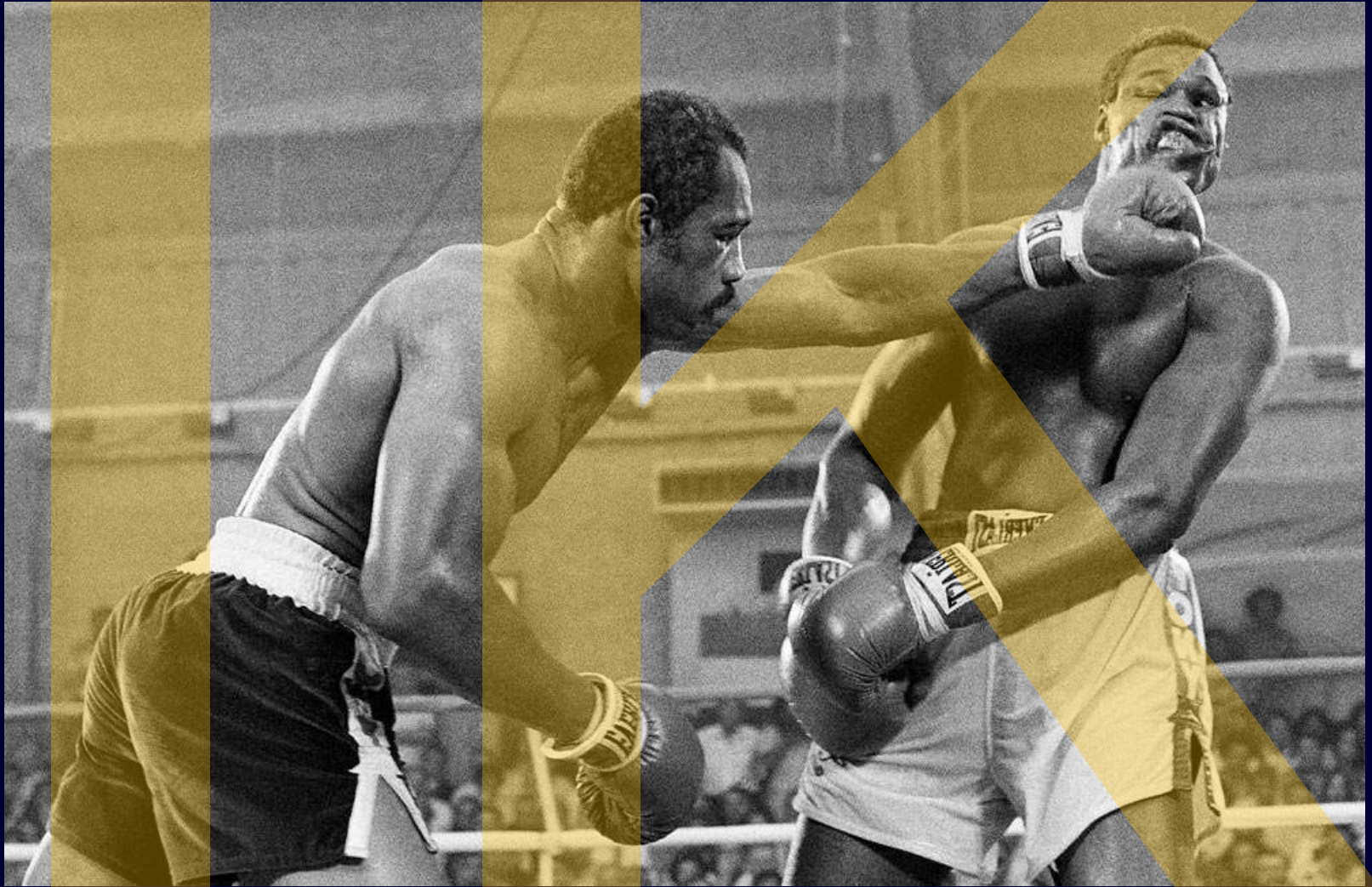
TITANIUM JAKO BIOMATERIÁL

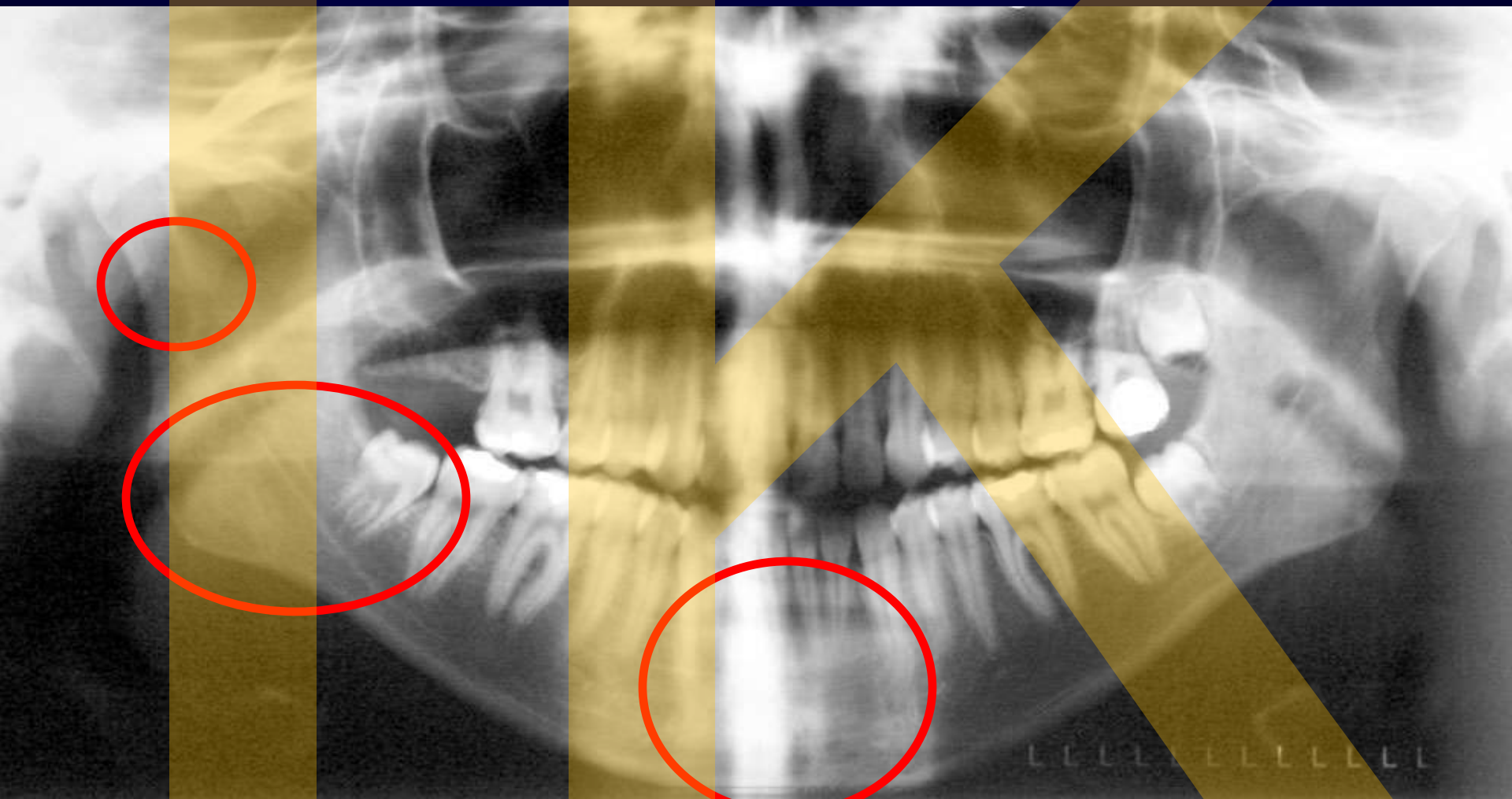
- Rezistentní vůči korozi
- Žádná toxicita nebo karcinogenita
- Ohybatelnost
- Mechanická síla
- Tkáňová kompatibilita - OSTEOINTEGRACE

Useful positions ?



*Champy M, Loddé JP, Schmitt R, et al:
Mandibular osteosynthesis by miniature screwed plates via a buccal approach.
J Max-fac Surg, 1978, Vol. 6, p. 14-21.*

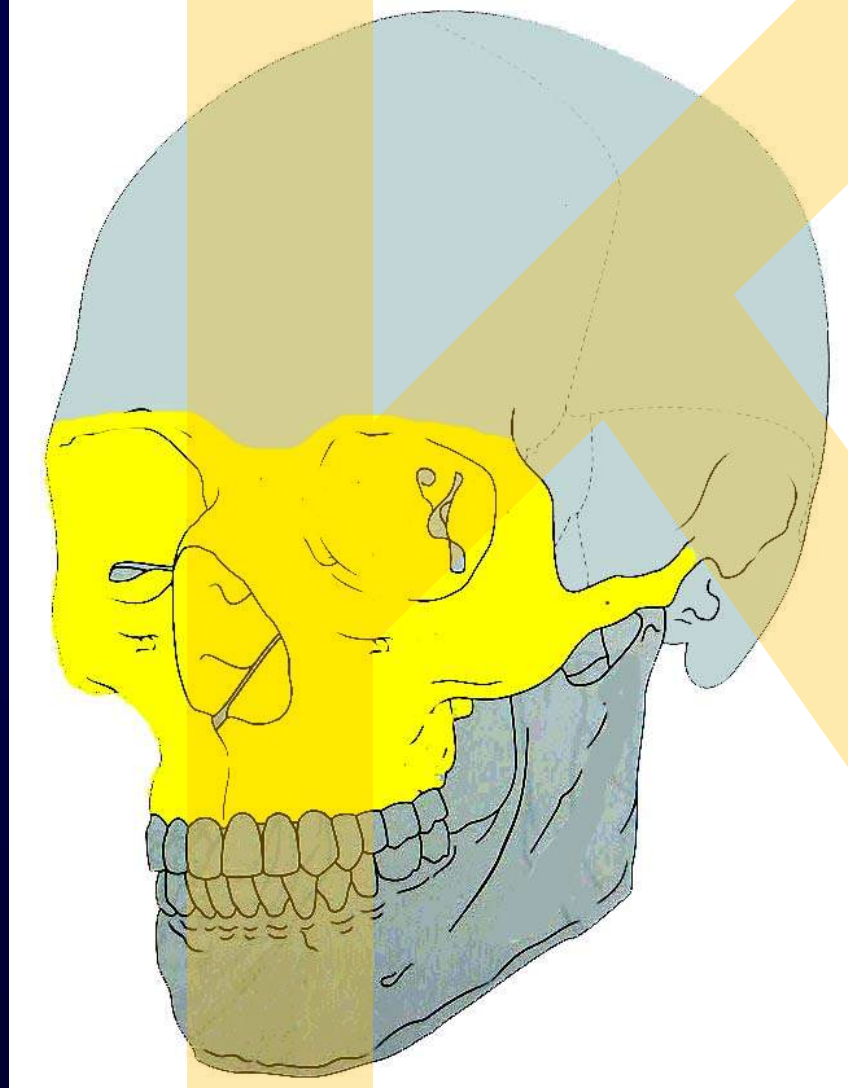




Some fractures - examples

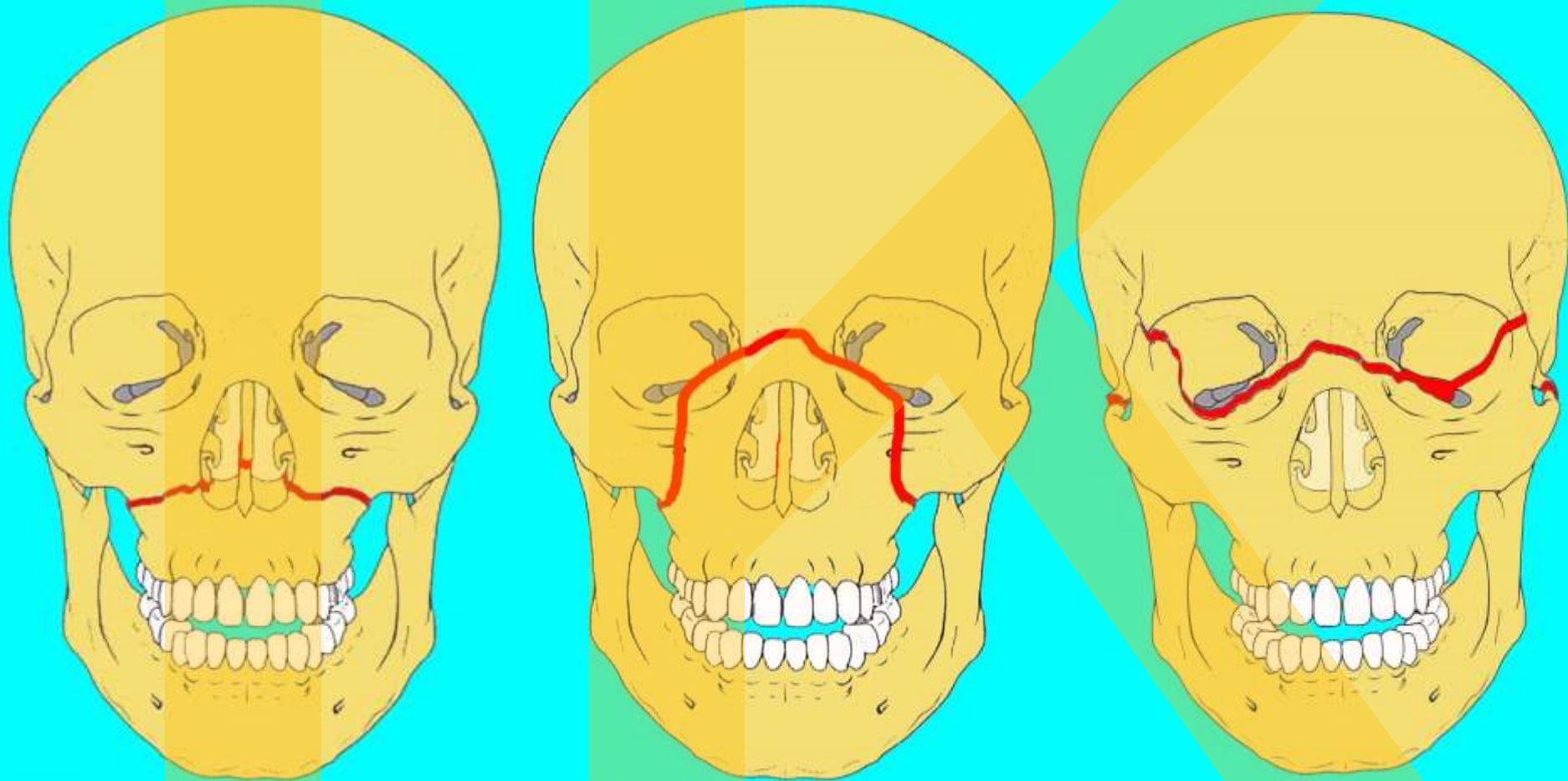


MIDFACE



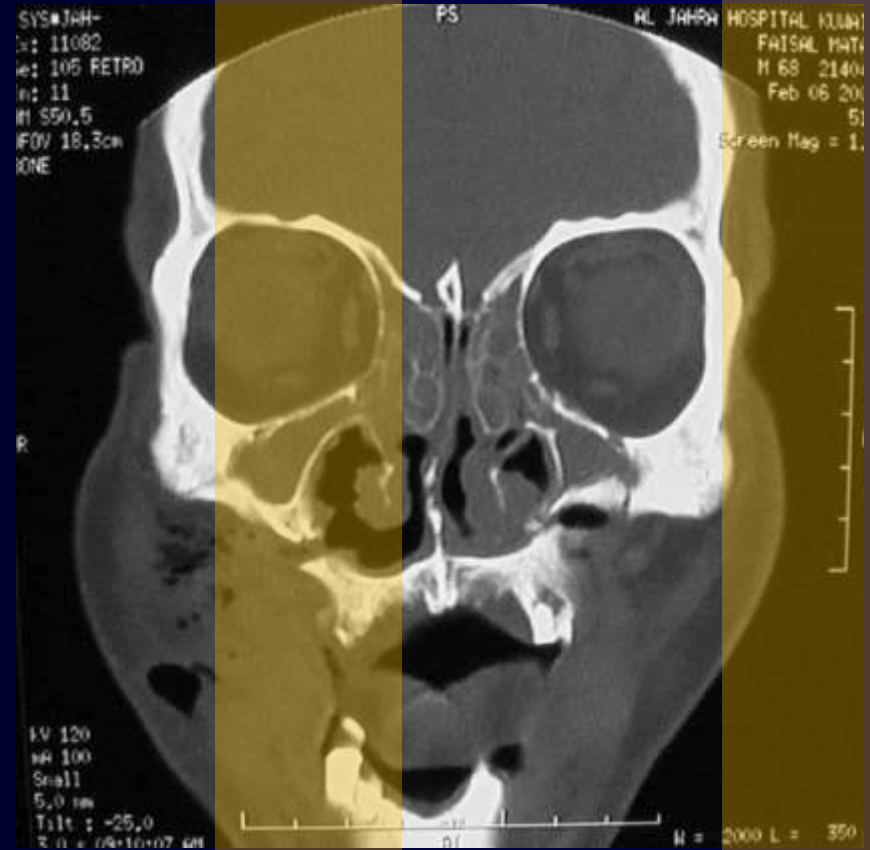
*Surgeon
view*

LE FORTOVY LOMNÉ LINIE

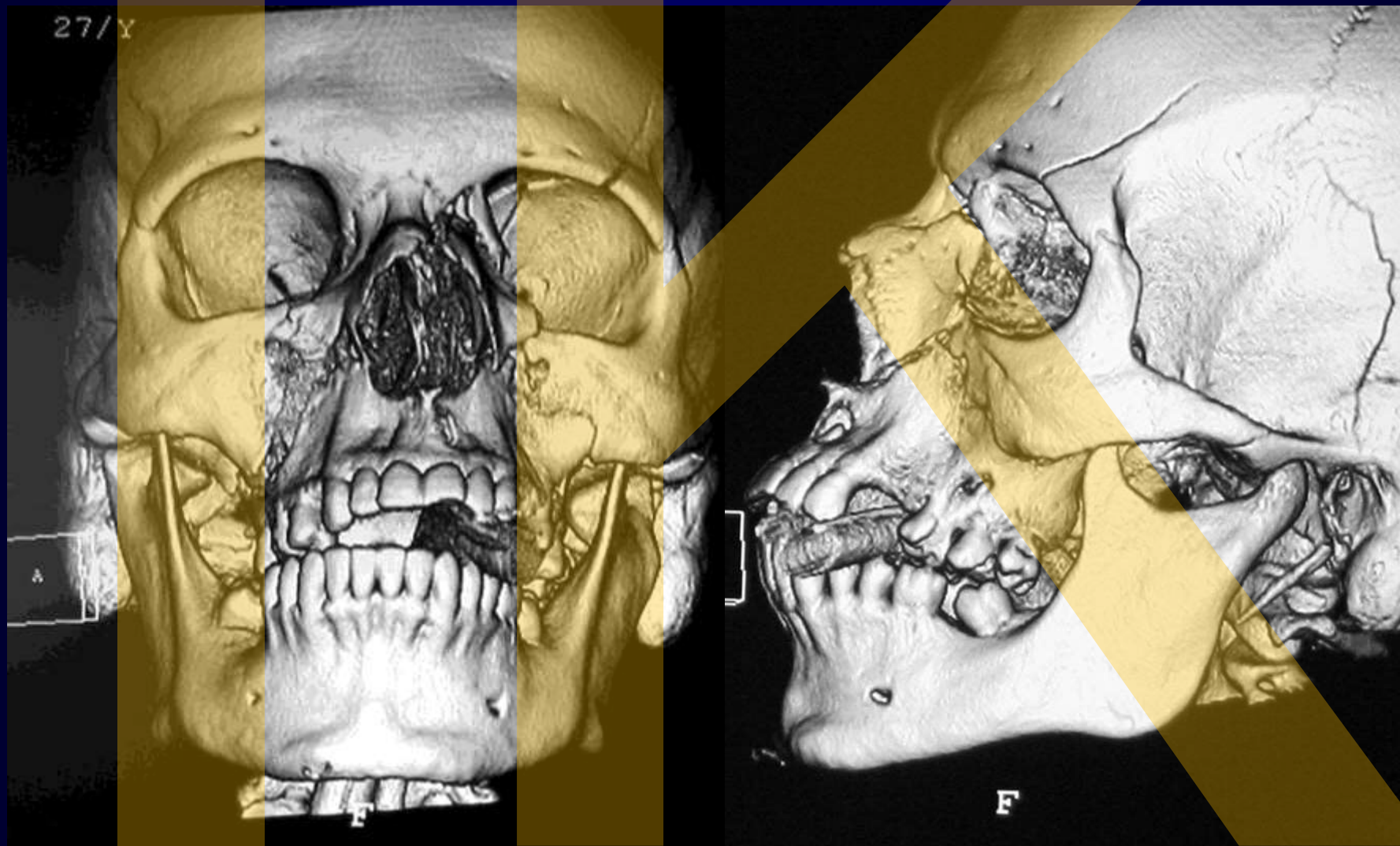


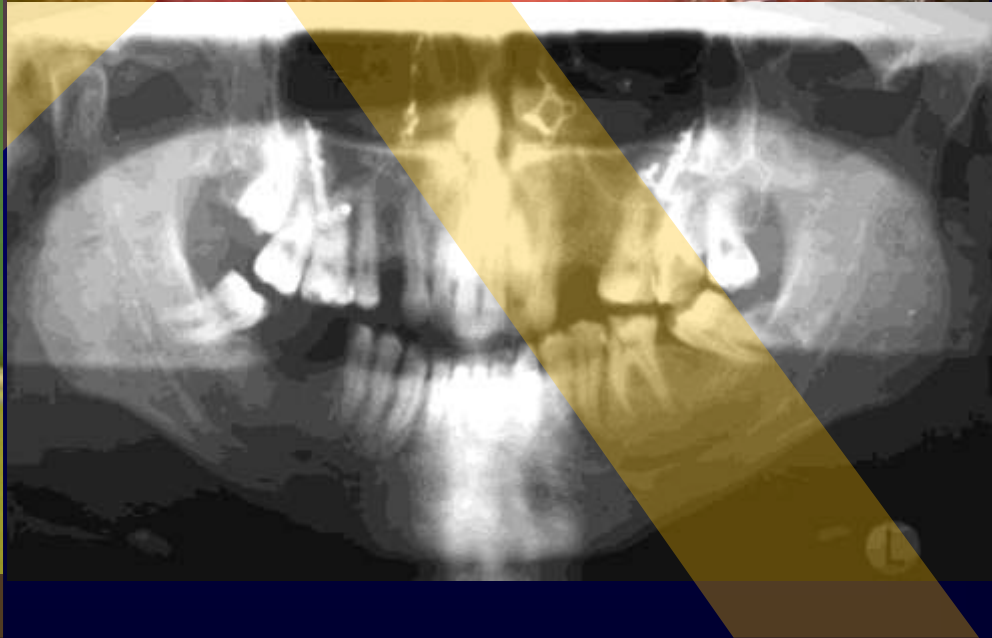
LE FORT FRACTURES

LE FORT I

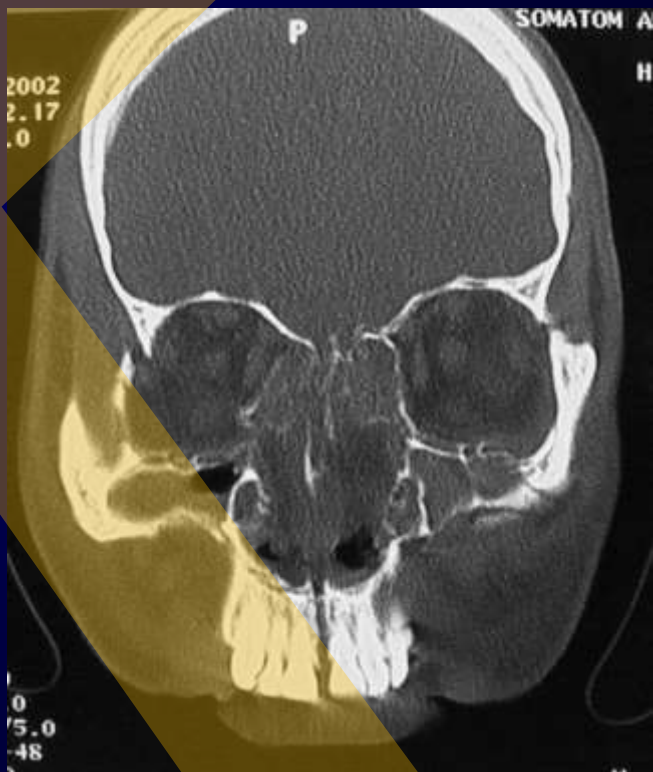
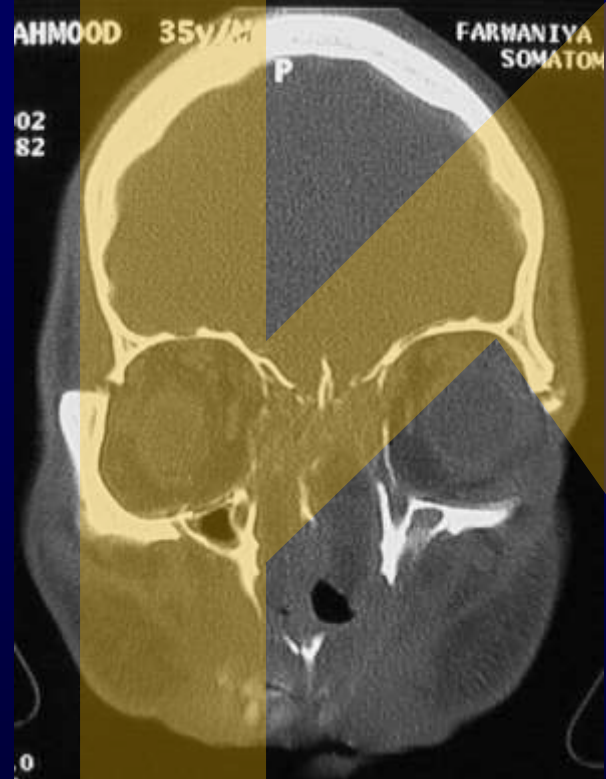


LE FORT II





LE FORT III



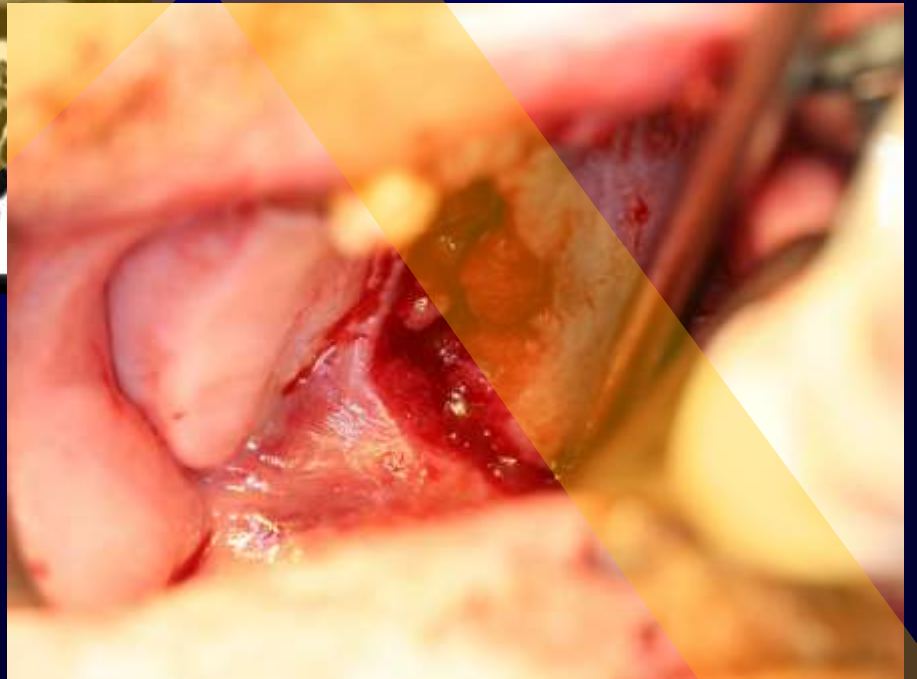
WASSAM NASSEB
3434 M/40y
2863-11
-684.00 mm

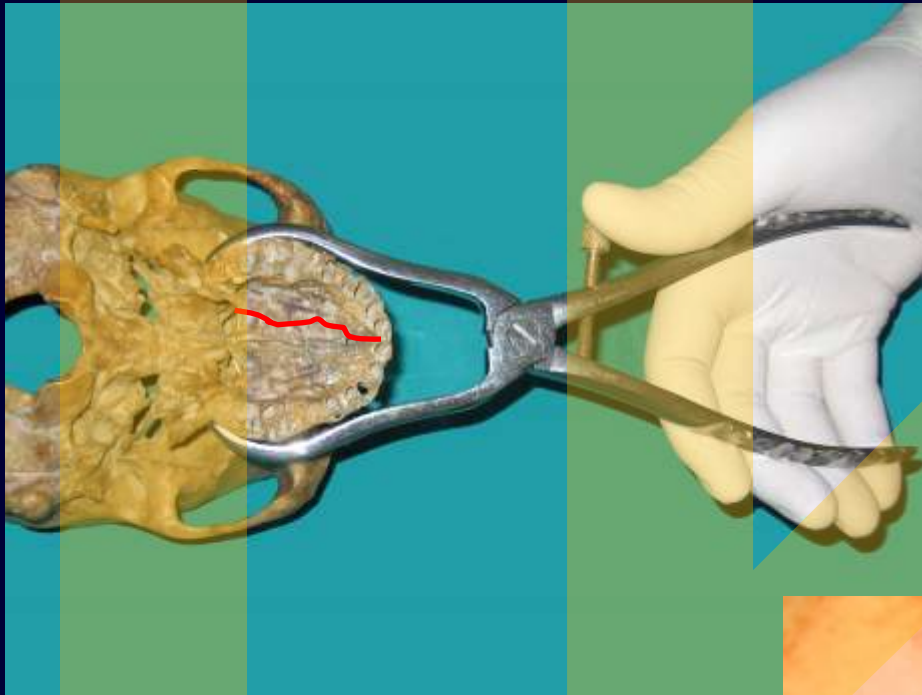
Institution Name
Philips Mx8000 Dual
20 Oct 2005 12:15:42.6
120kV, 185mAs
SC 240.0 mm
SW 3.00 mm
Z 1.42

R

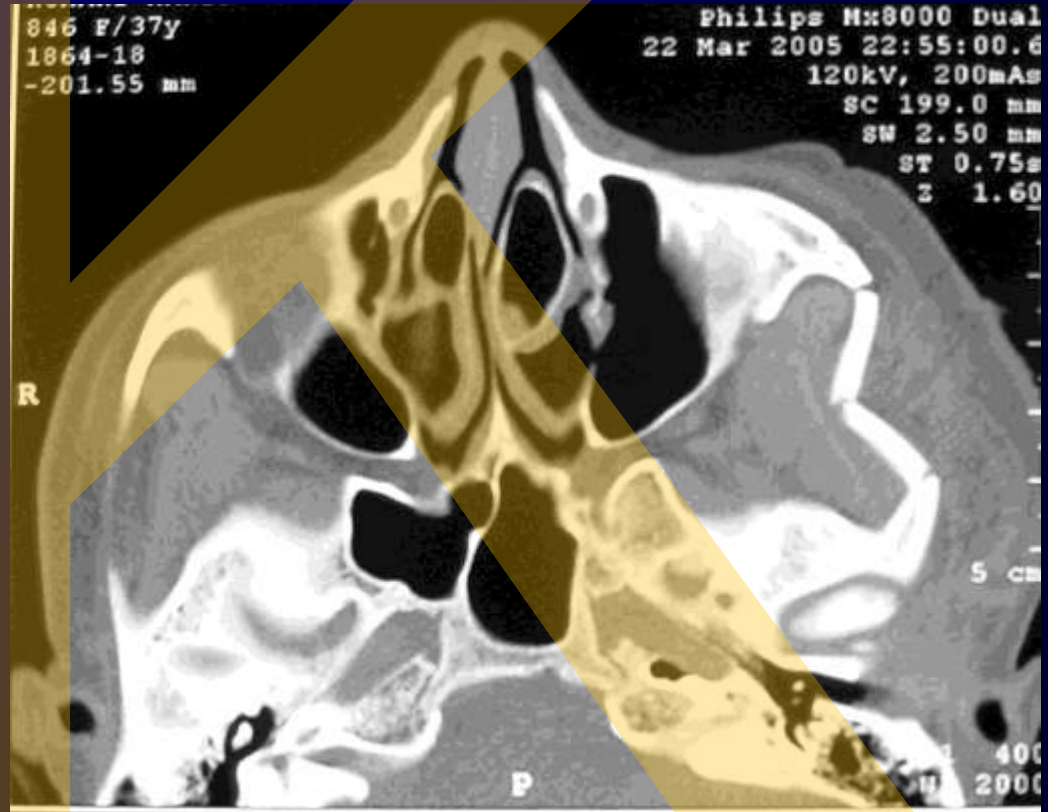
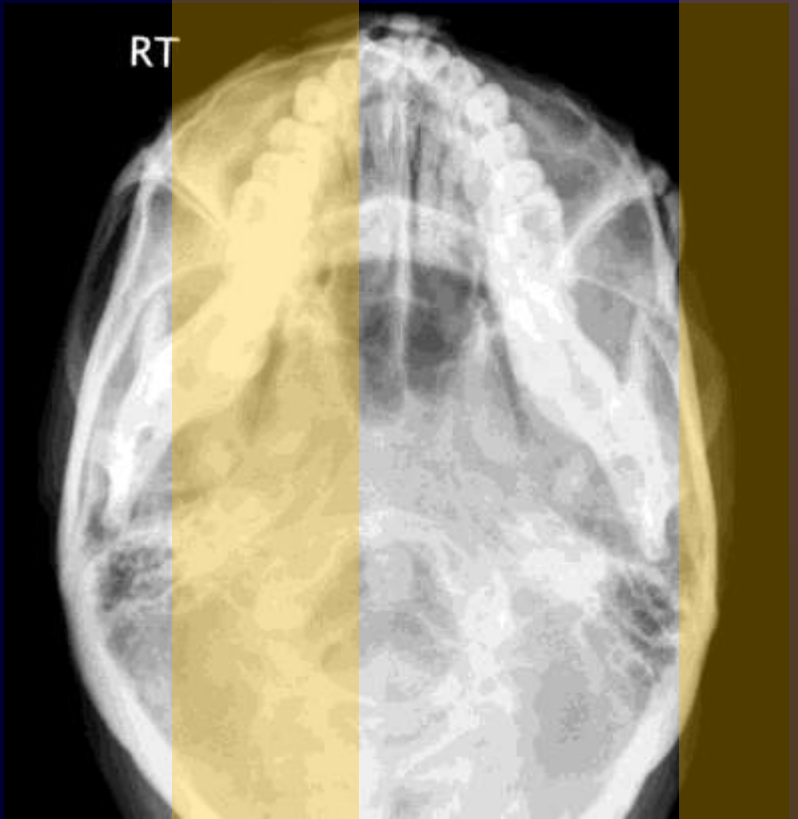
P

5 cm

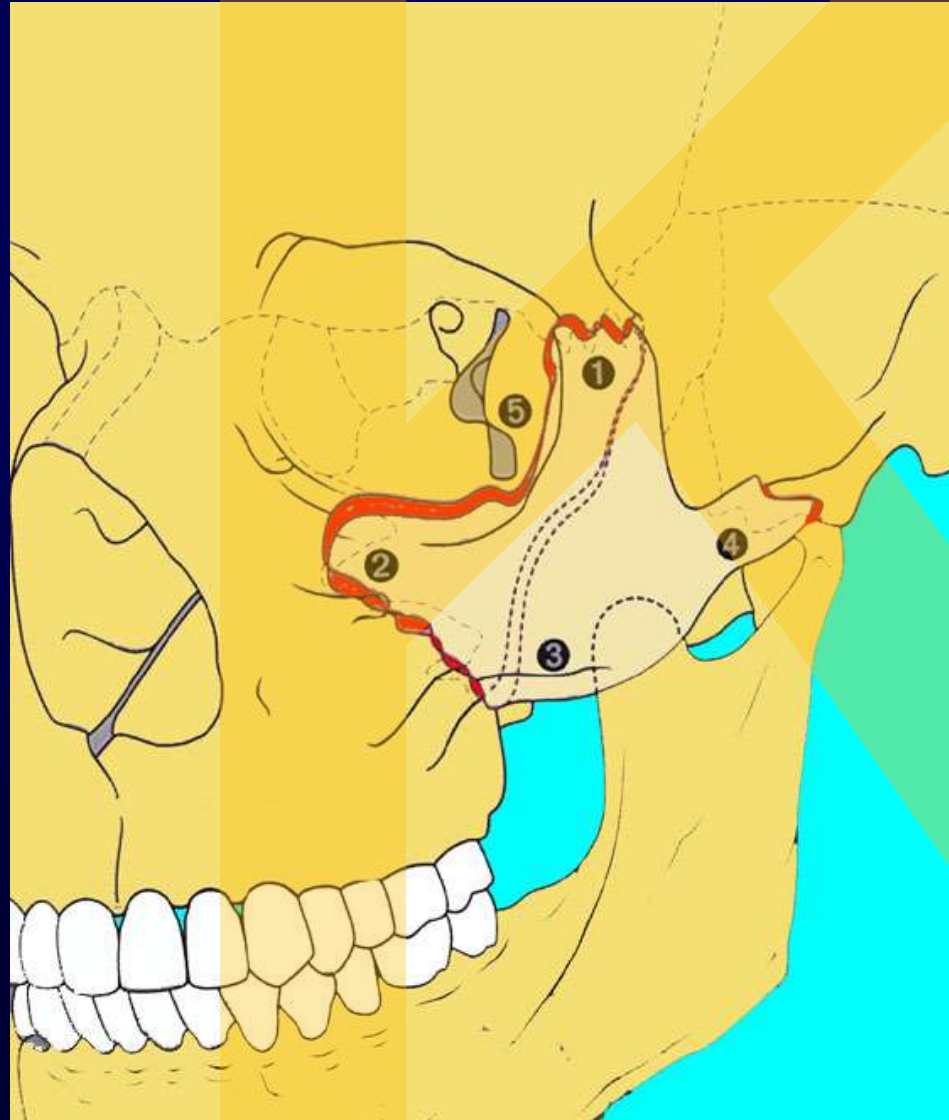




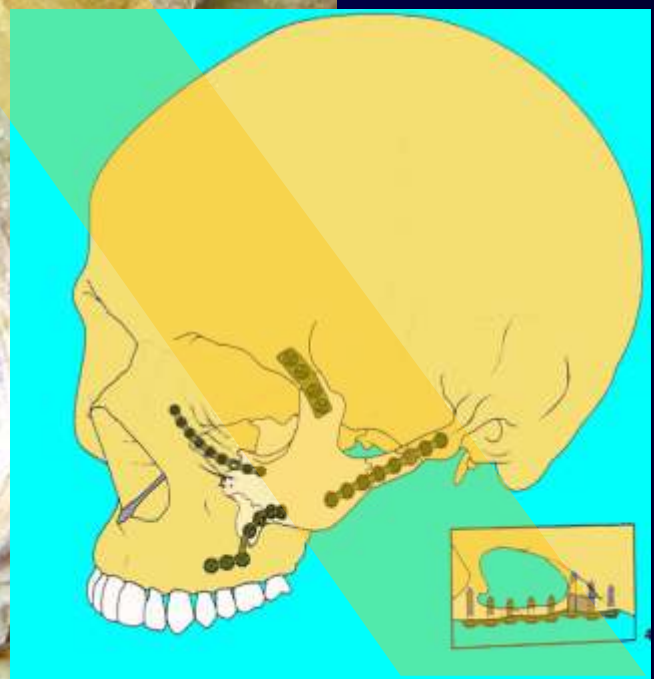
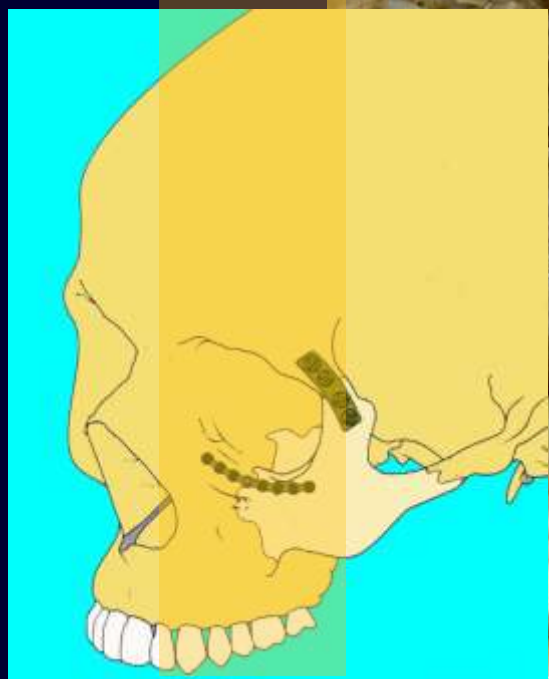
ZYGOMATIC ARCH



ZYGOMATICO-MAXILLARY COMPLEX



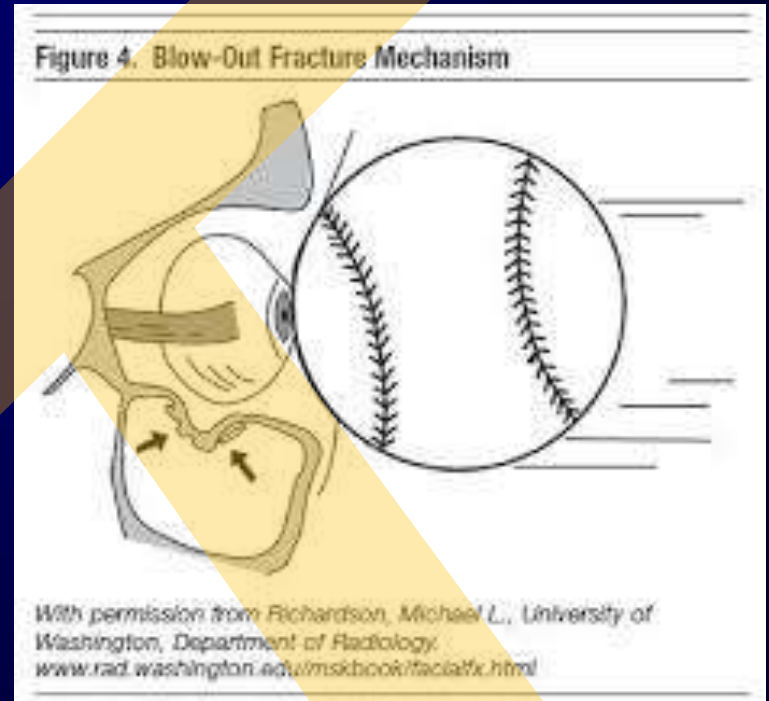
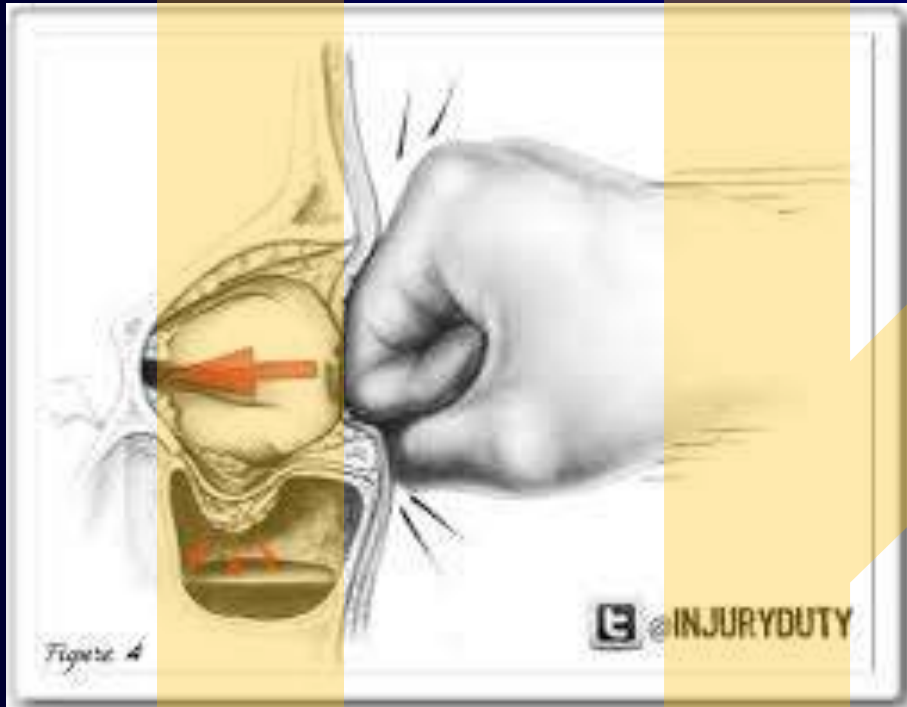


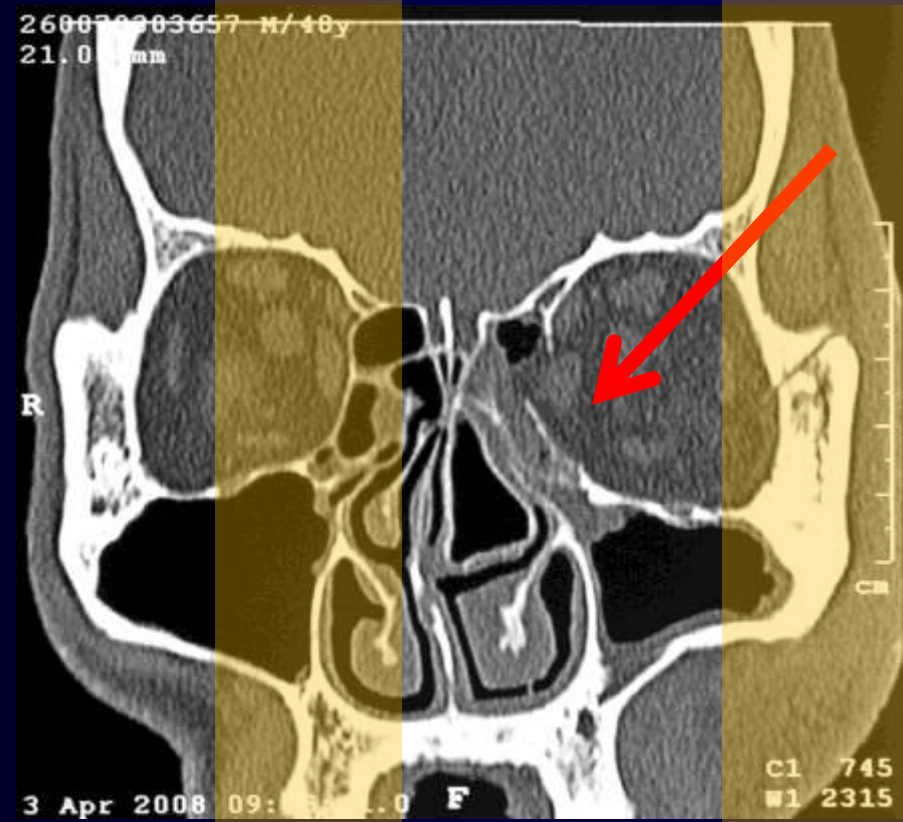


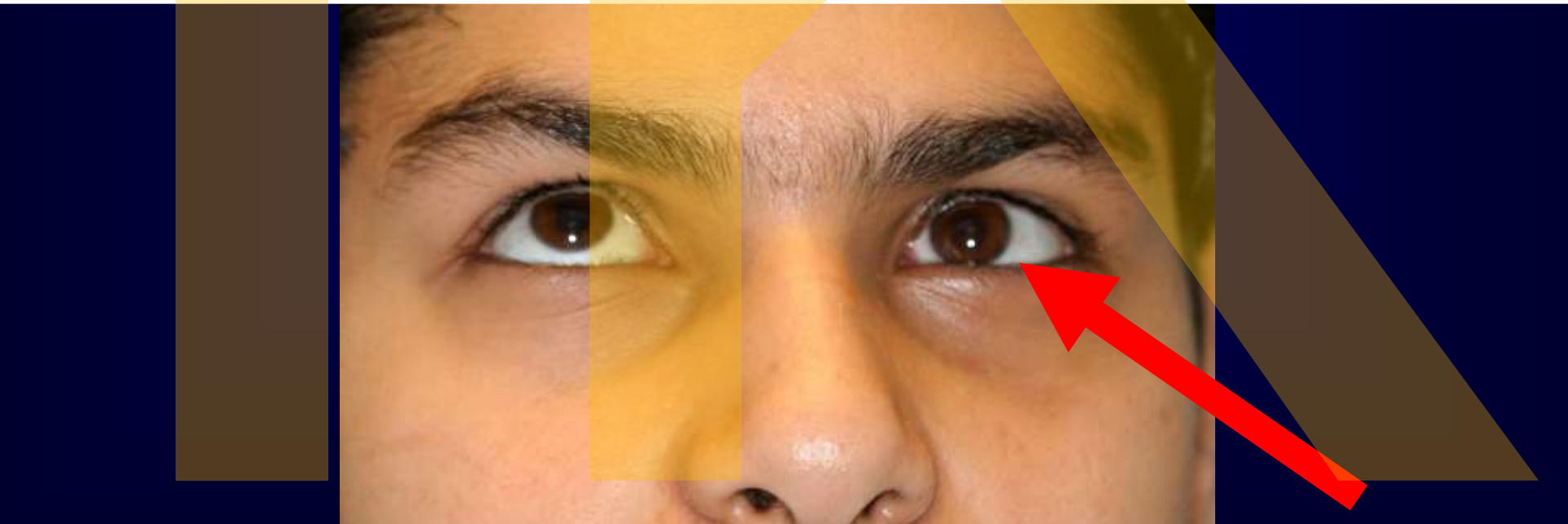
ORBIT

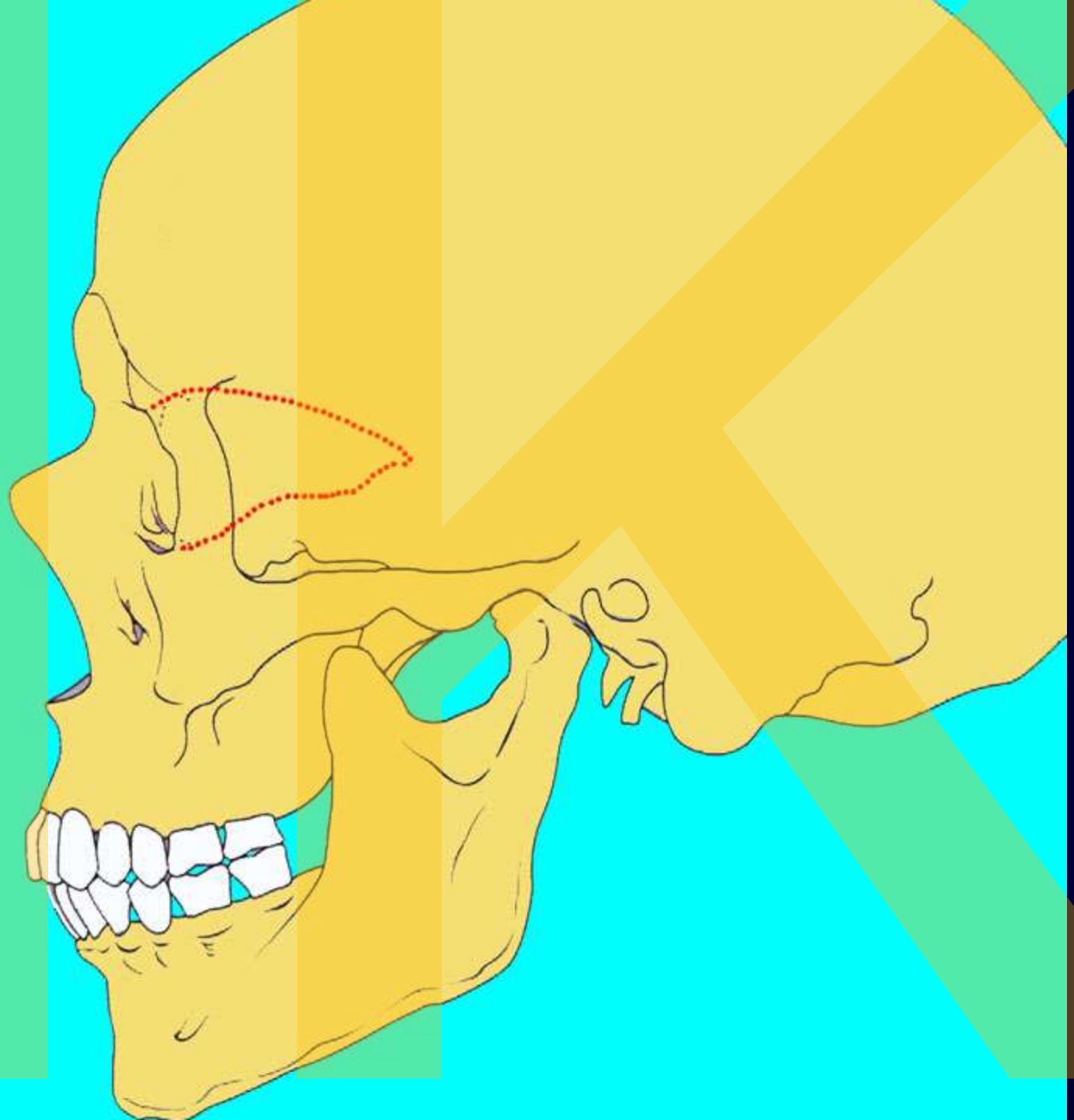


BLOW-OUT











KONEC
END