

# Change of conception? Sinus Frontal Fractures Therapies

Dr. Tímea Földi

Dr. Gusztáv Klenk

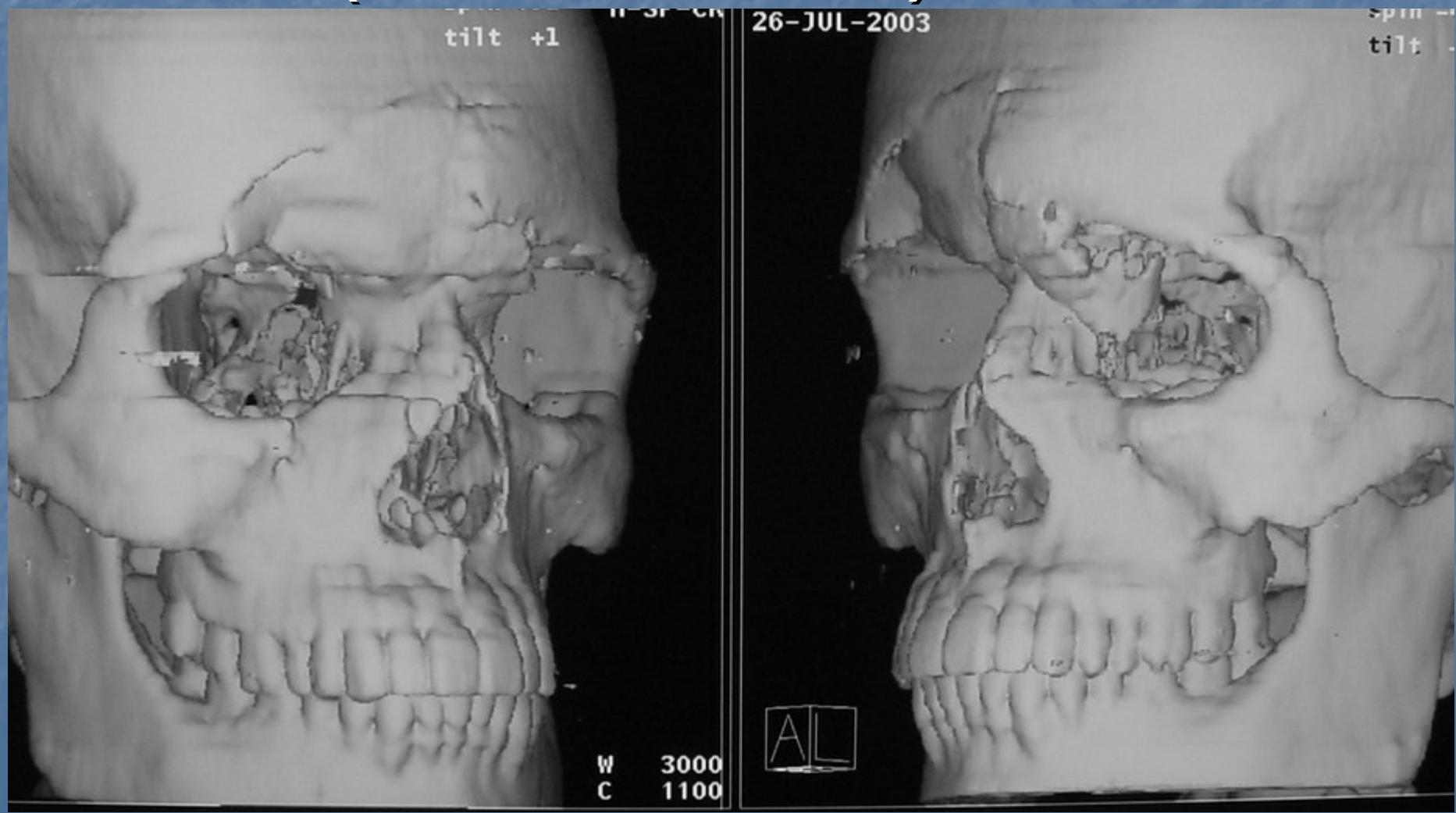
St. John's Hospital

Department of Cranio-Maxillofacial and Oral-Surgery

MWIA 2010

# Incidence

- 2-12% (Stevens et al 1995)



# Etiology

- Car accident
- Falling
- Violence
- Workplace accident



# Problems

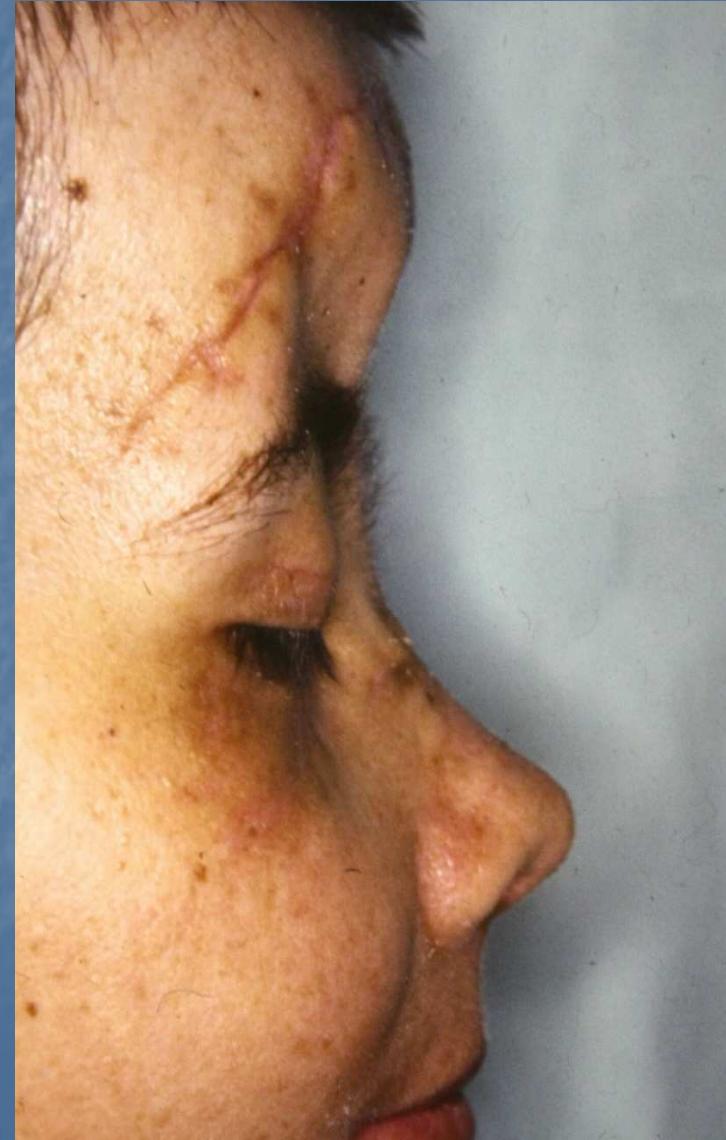
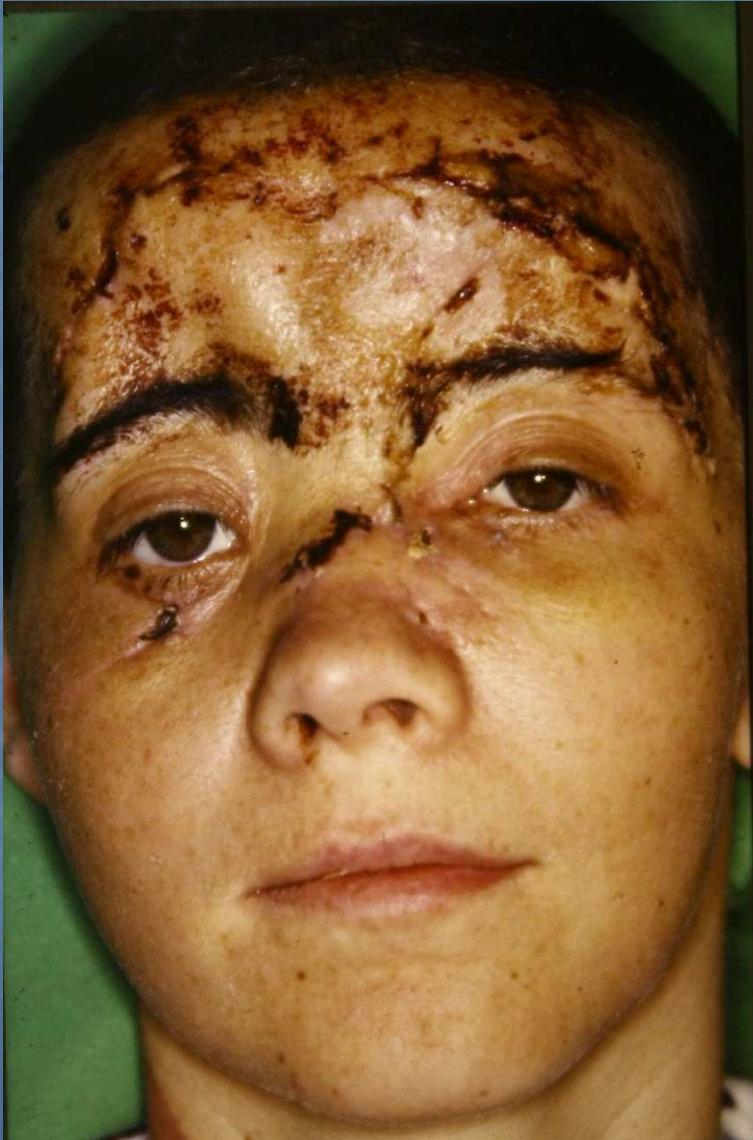
- Anterior table
- Posterior table trauma
- Dura injury
- Brain injury
- Eyes
- Long term complications?
  - Mucokele - mucopyelocele.....



# Goals

- Cosmetic considerations
  - Bone contour
  - Scars
- Function
  - Perfect sinus function / Sinus obliteration
  - V/1, VII nerves function
  - Iliquorrhoea
  - Abscess of the brain

# 1. Anterior wall loss



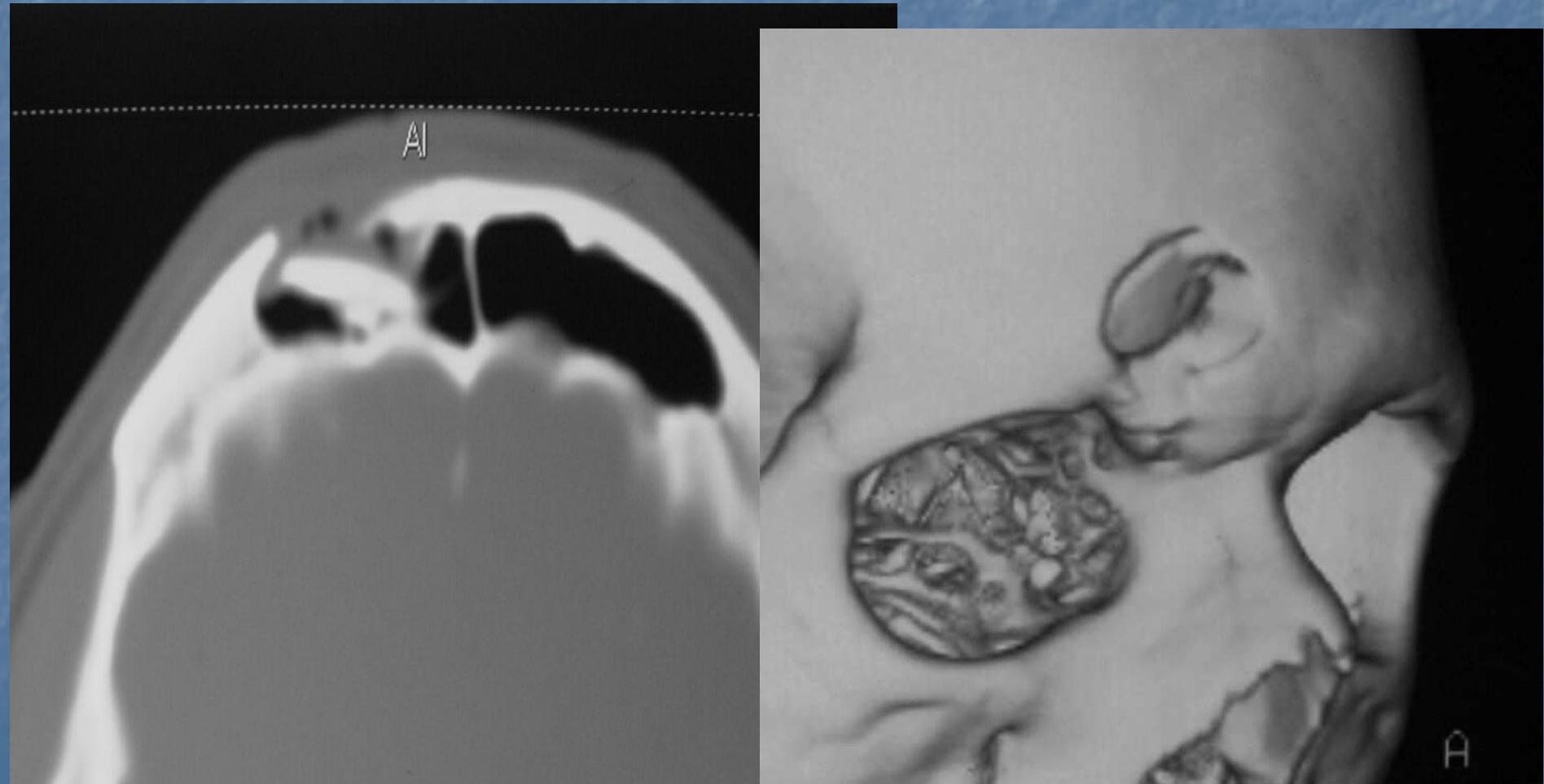
## 2. Exploration over the eyebrow



# Retrospective Analysis 2008-2010

- 173 Fractures in Total , (85 midface)
- 4 Frontal Sinus fractures, 4% of midface fractures ,2% of all
- 3 isolated
- 1 in combination with Le Fort I-II-III
- 3 males, 1 female

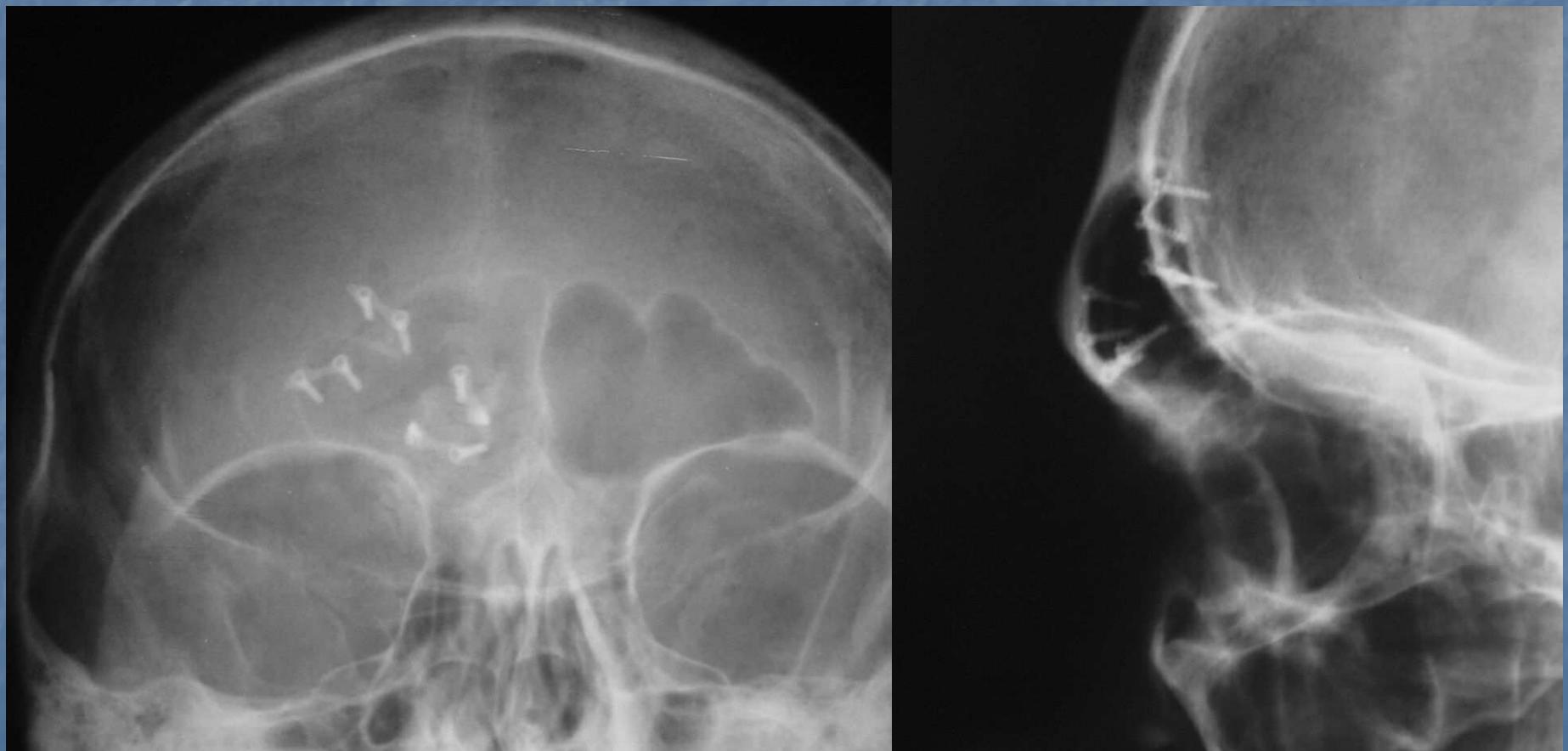
# Examples: Case 1. 2D and 3D CT



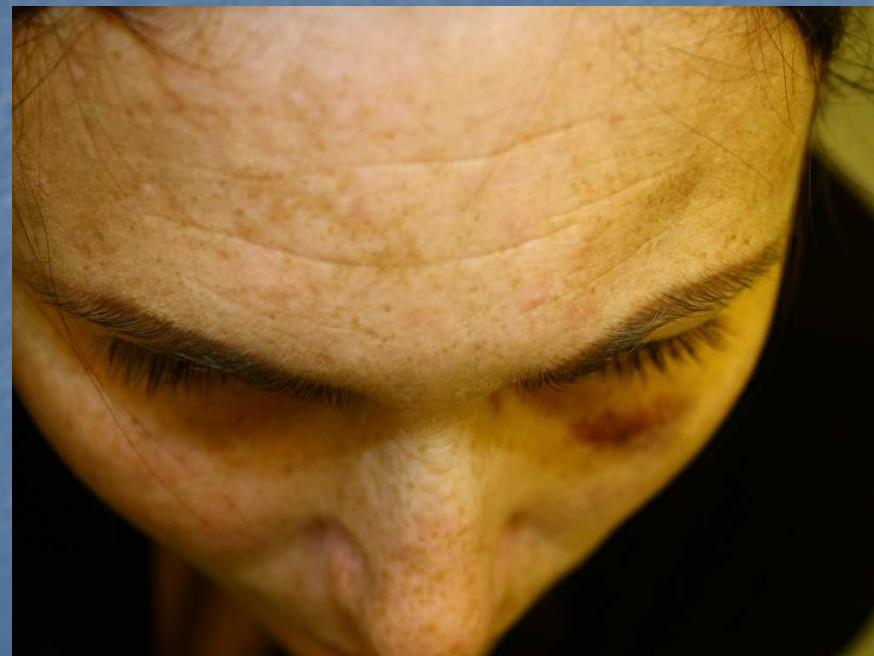
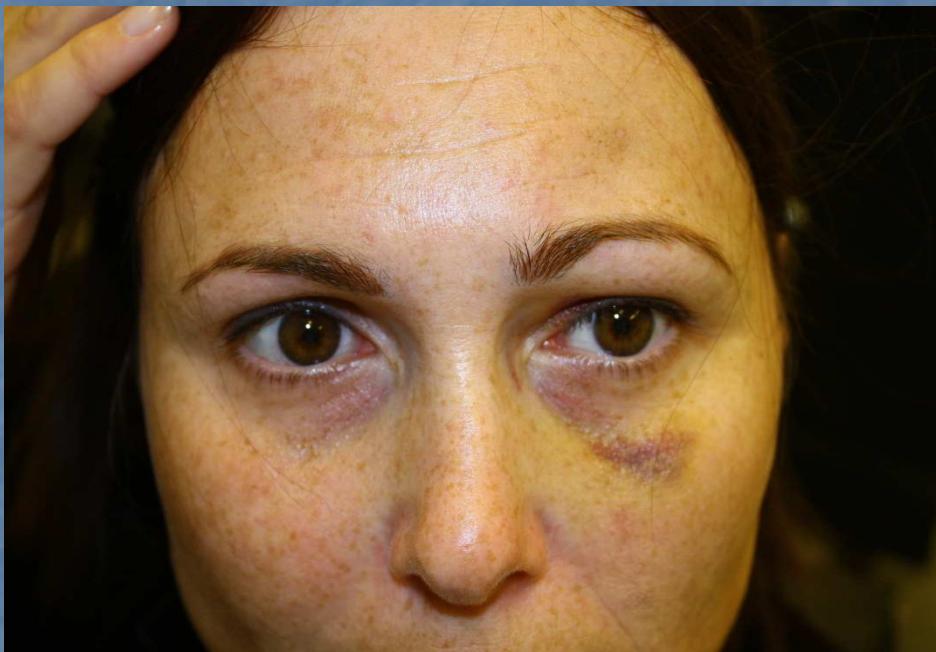
# Approach through the extension



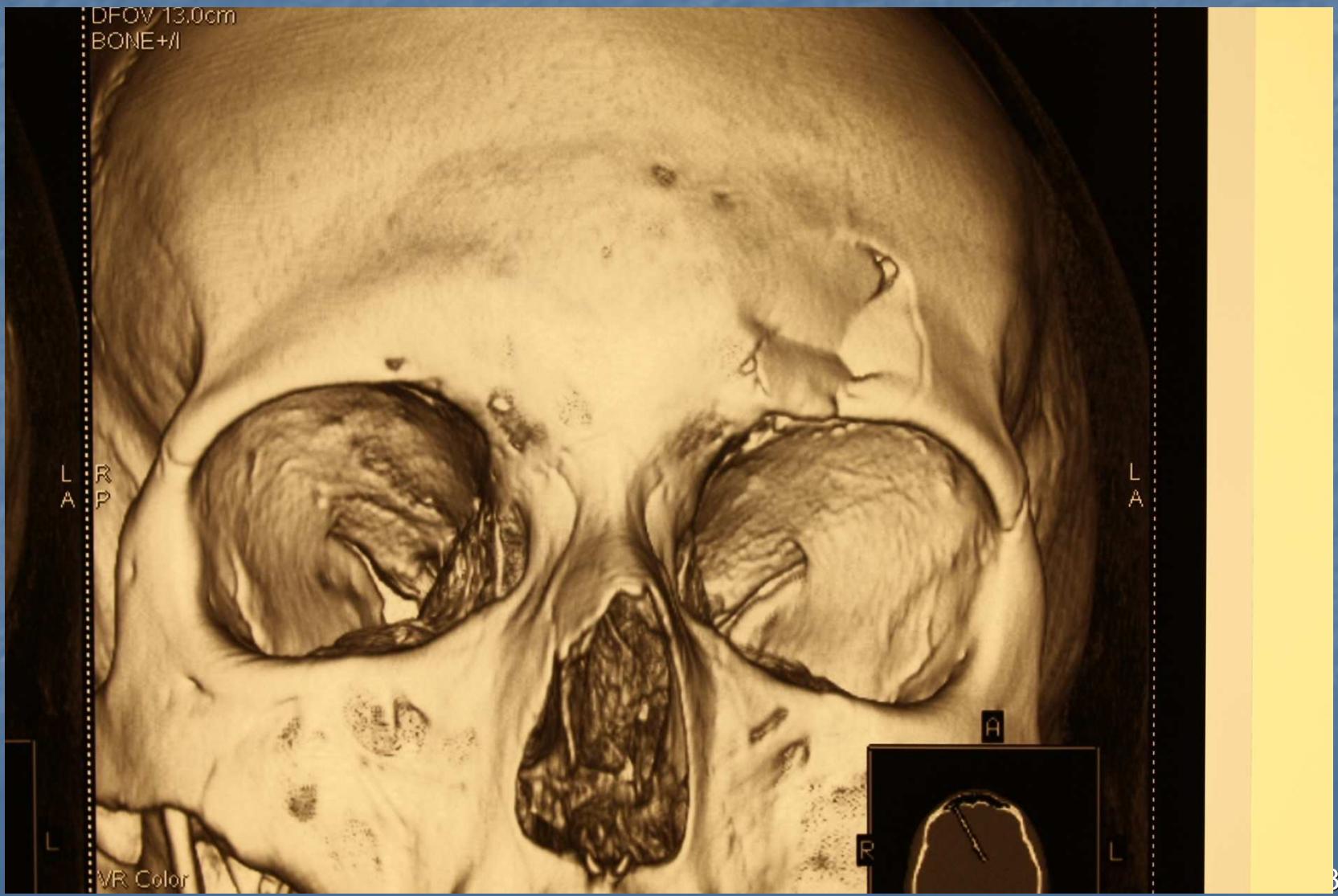
# Postop rtg



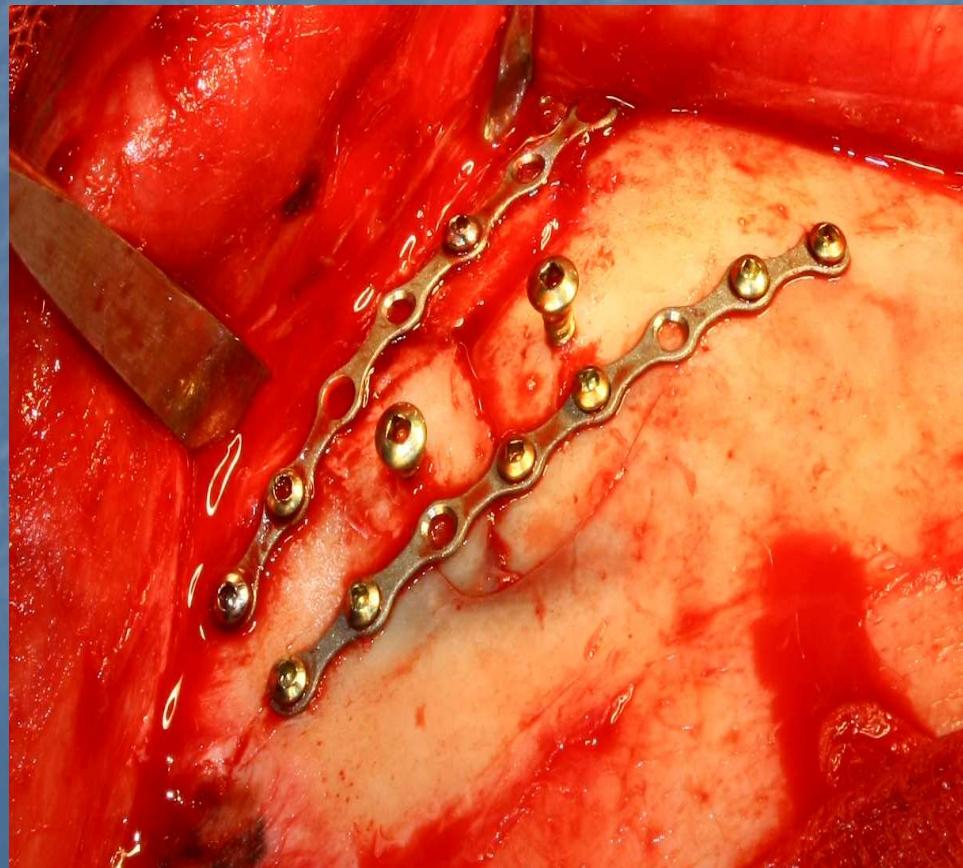
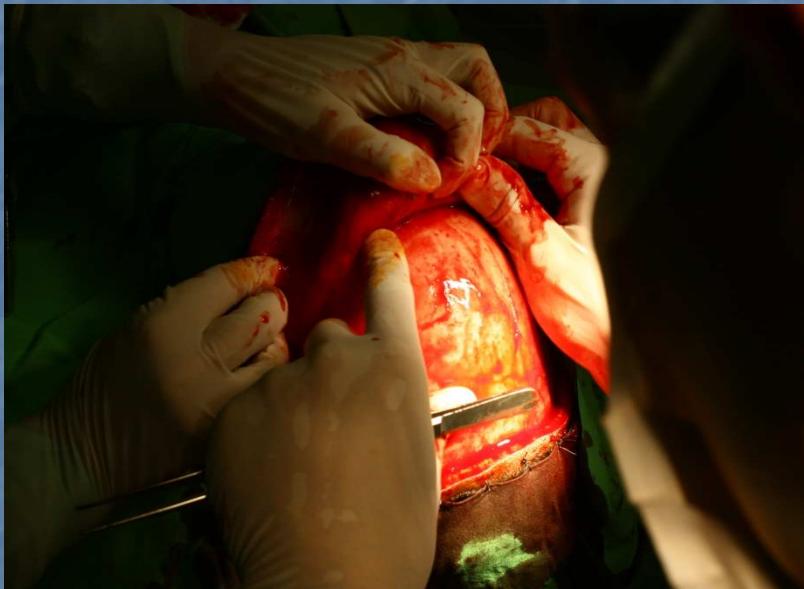
# Case 2.



# 3D CT



# Coronal incision



# Postoperative



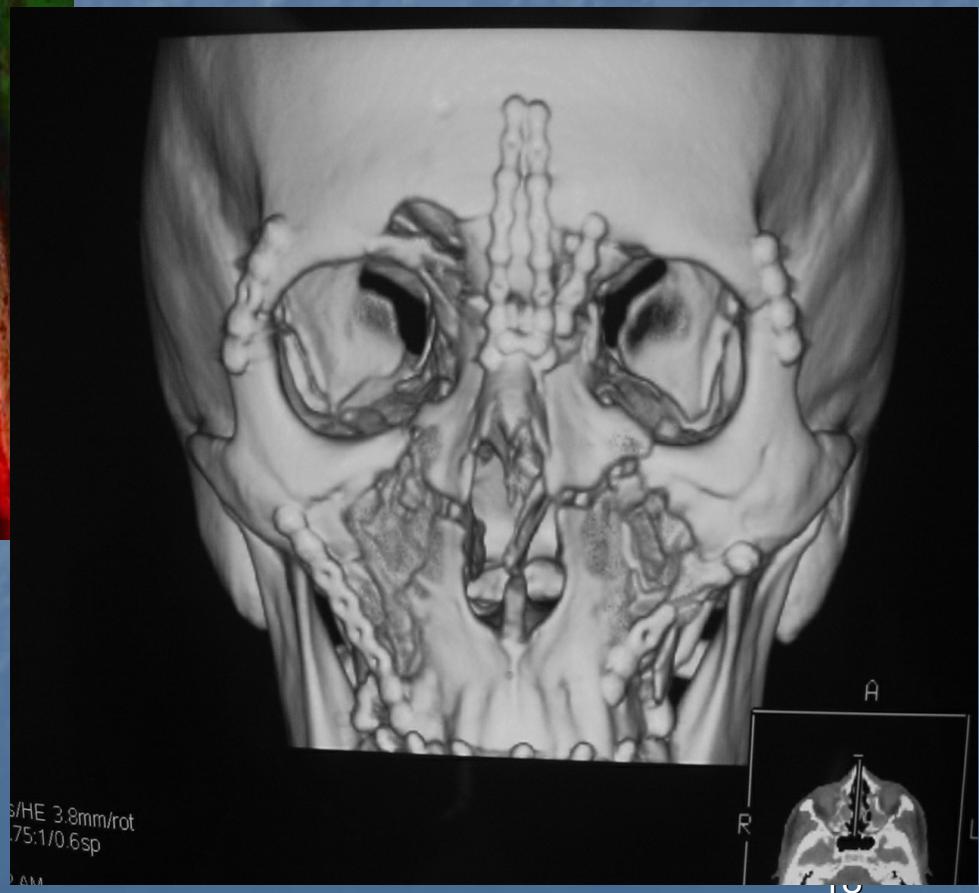
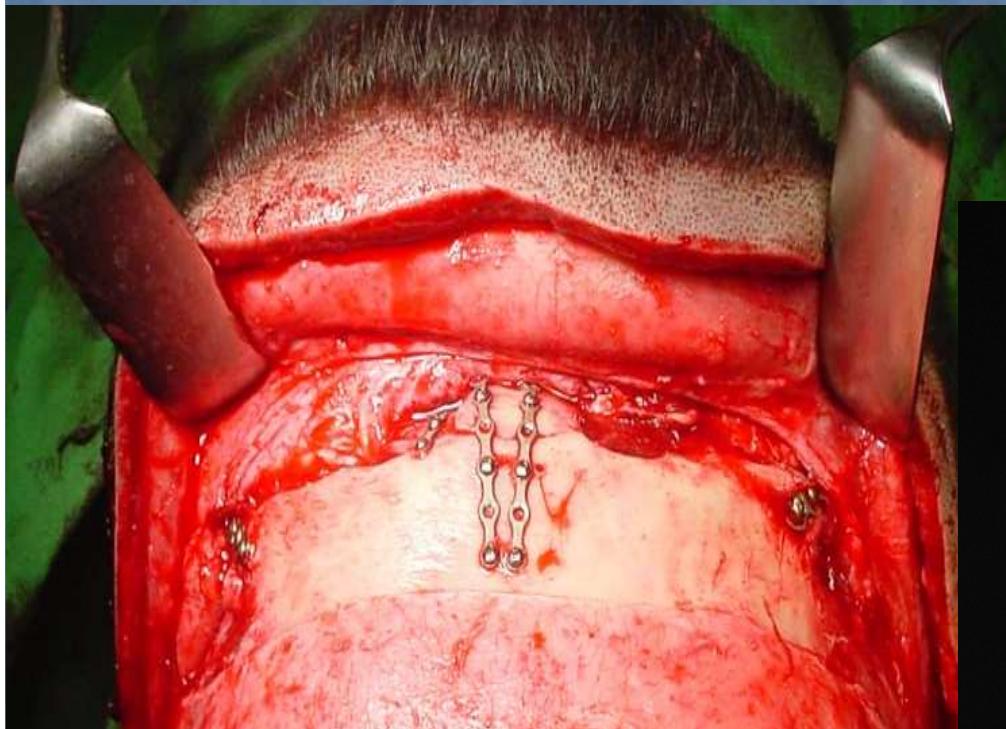
# Case 3. Le Fort III.



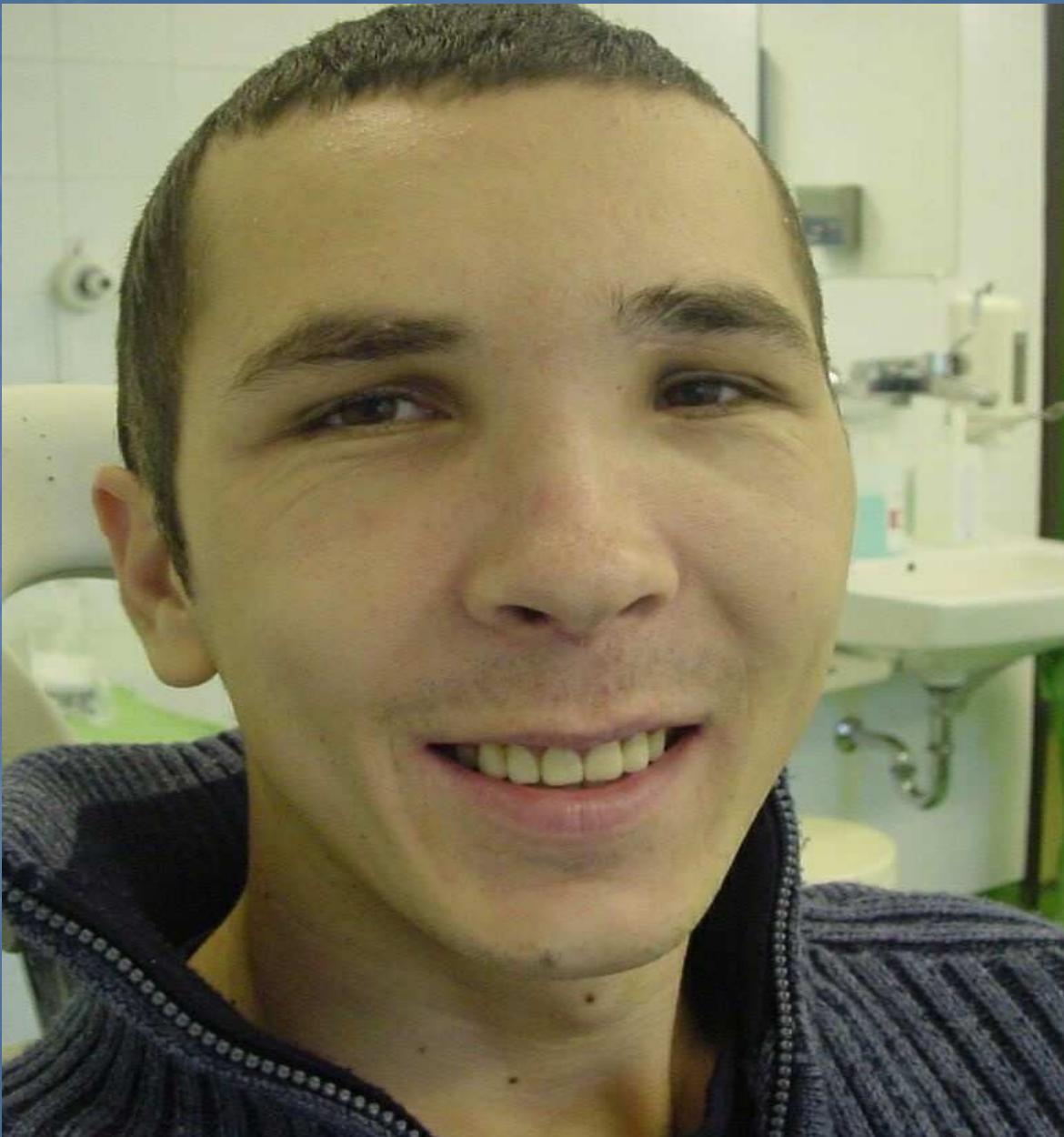
# 3DCT



# Reposition and fixation



# The Happy Patient



# Results

- Good cosmetic result
- No nerve Injury (VII, V/1)
- Good sinus function...
- No complication so far (14 months)

# Conclusion

- 3D CT is essential
- Coronal incision
- Titanium microplates, no second operation

# Thank You!