Monobloc and Facial Bipartition Osteotomies

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GSR Institute of Facial Plastic Surgery

- Non-profit hospital established in 1996
- Dedicated Cleft & Craniofacial Centre of Excellence
- **1,500** cleft and cranio-facial surgeries are done every year
- 2 surgeons and 4 fellows with full support team
- More than **30,000** cleft & craniofacial surgeries have been performed since 1996
- **600** primary new born cleft children are treated every year

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Facial Bipartition and Monobloc Osteotomy

Why?

- To correct midface deformities caused by
  - craniosynostosis syndromes
  - frontonasal dysplasias
  - cranio-orbital clefting

What?

Monobloc

- advancing orbit and midface as one unit

•Fernando Oritz-Monasterio

Facial Bi-partition

- splitting the monobloc osteotomy in the midline to remove nasal and ethmoid bones and medializing the naso-orbital complex.
- Van der Muelen

Courtesy :

Kademani D, Tiwana P. Atlas of Oral and Maxillofacial Surgery , Elsevier Health Sciences - US; 1 edition. 2015

Facial Bipartition and Monobloc Osteotomy

How?

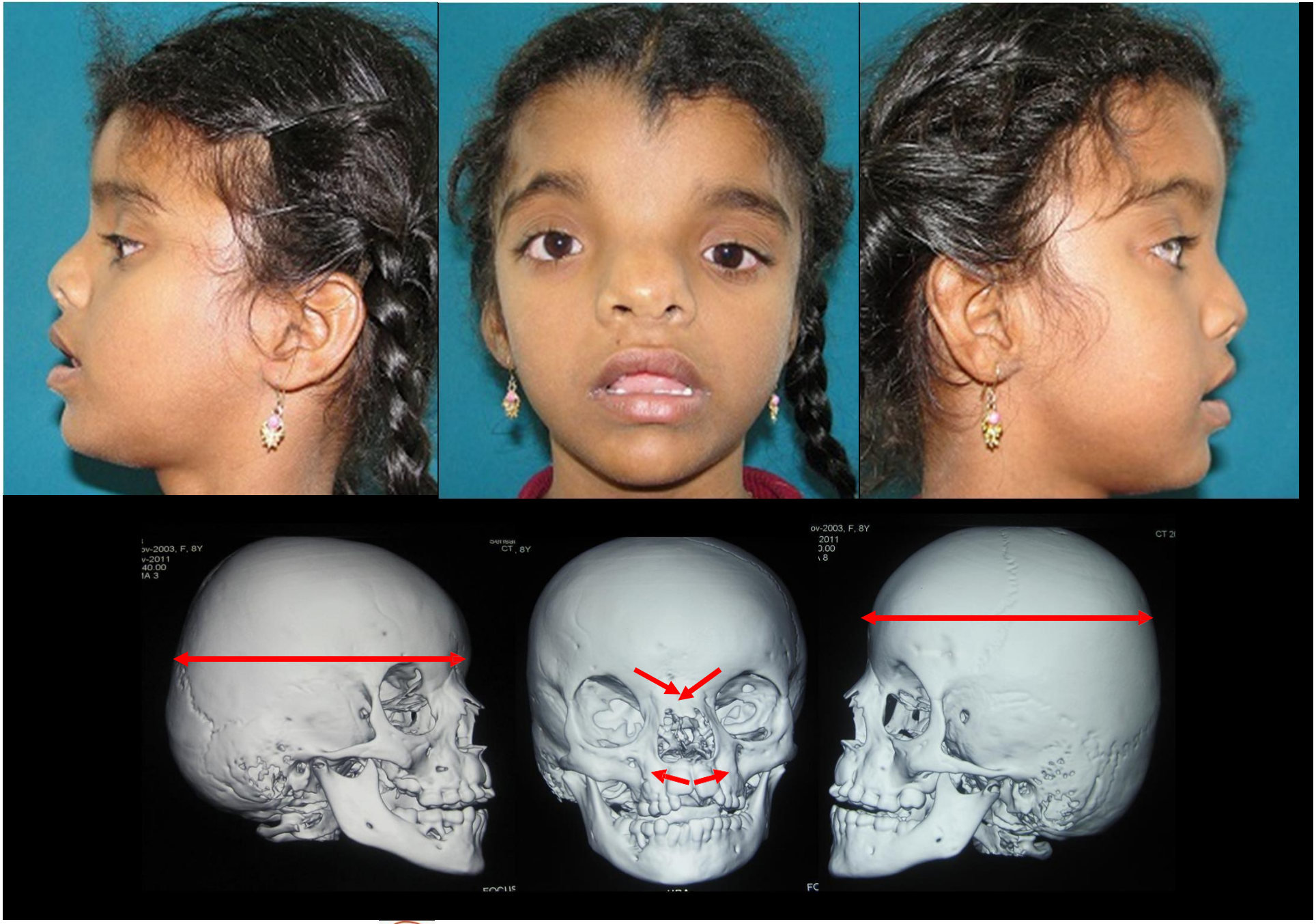
Facial Bipartition

Indications

- To increase antero-posterior dimension of the cranial complex

While also

- Correcting hypertelorism and
- Flattening the maxilla



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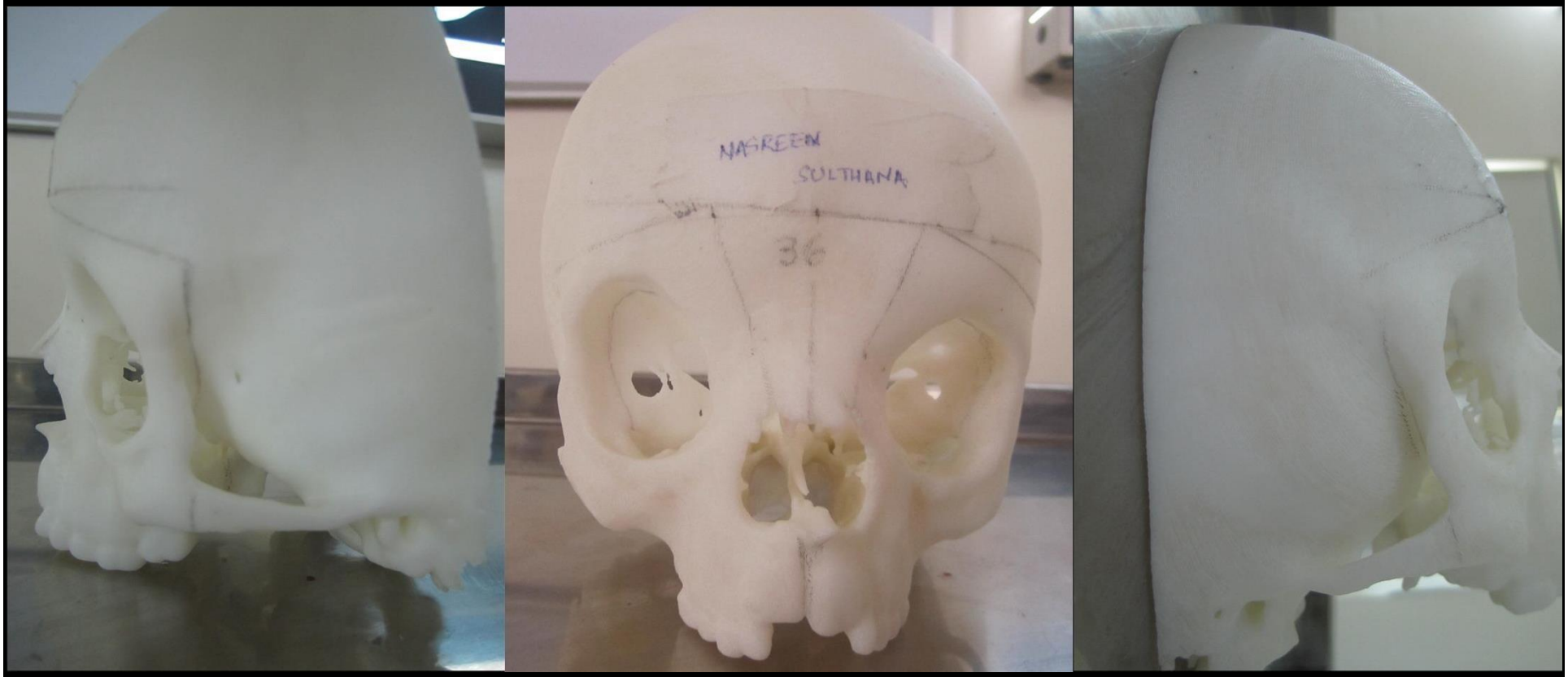
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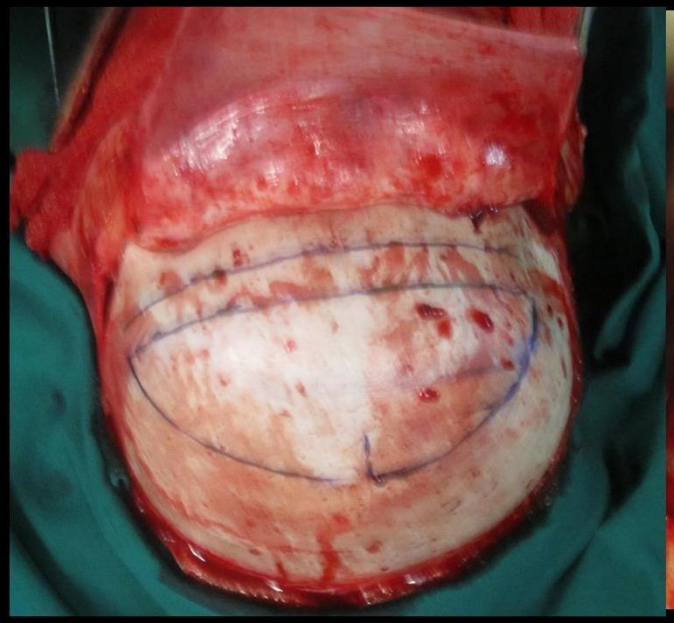
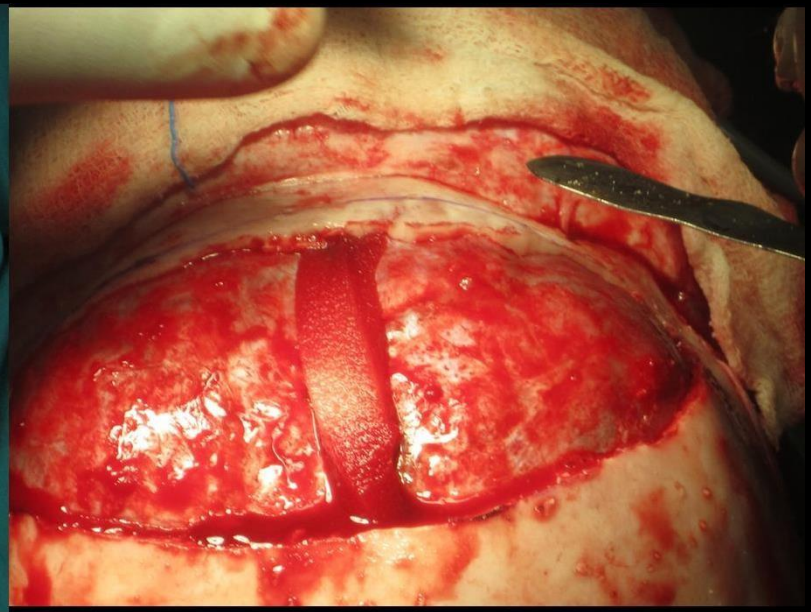
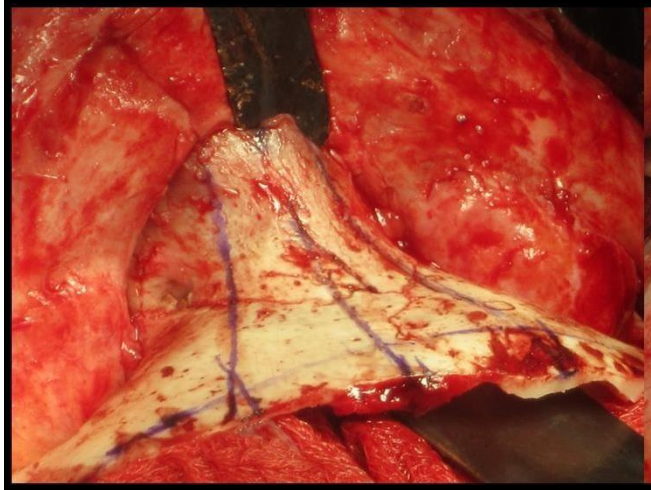
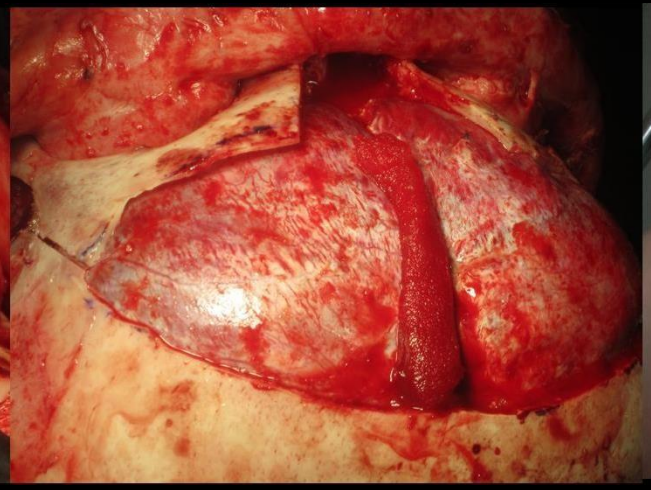
Frontal and medial craniotomy

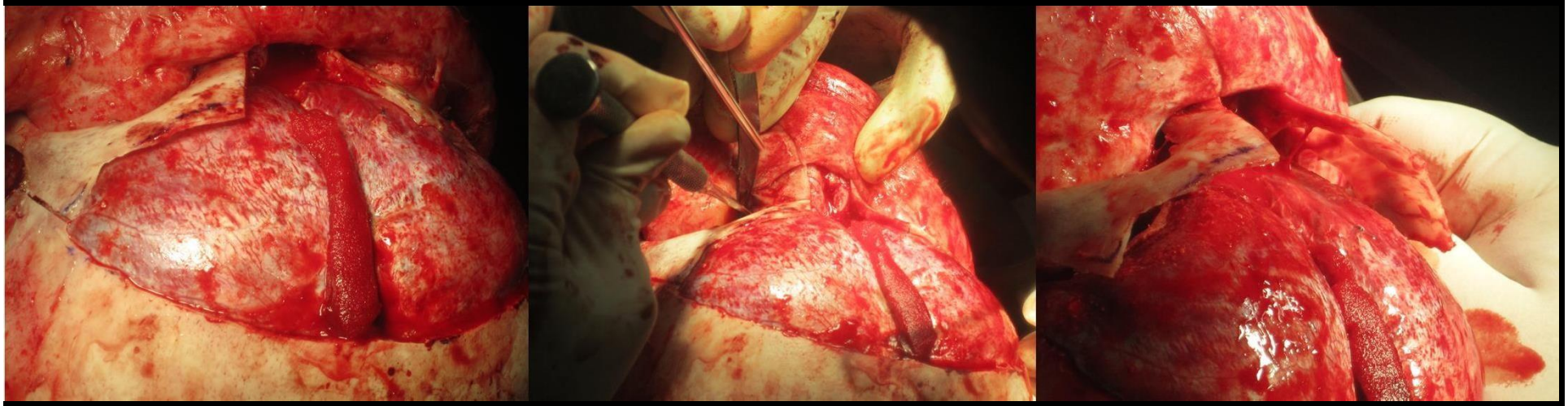






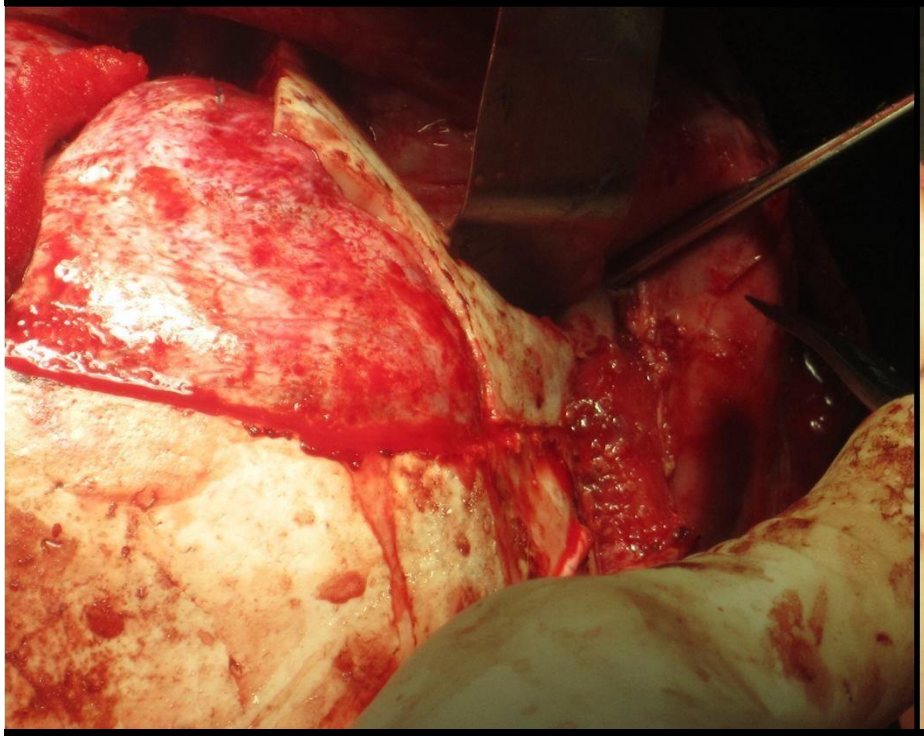


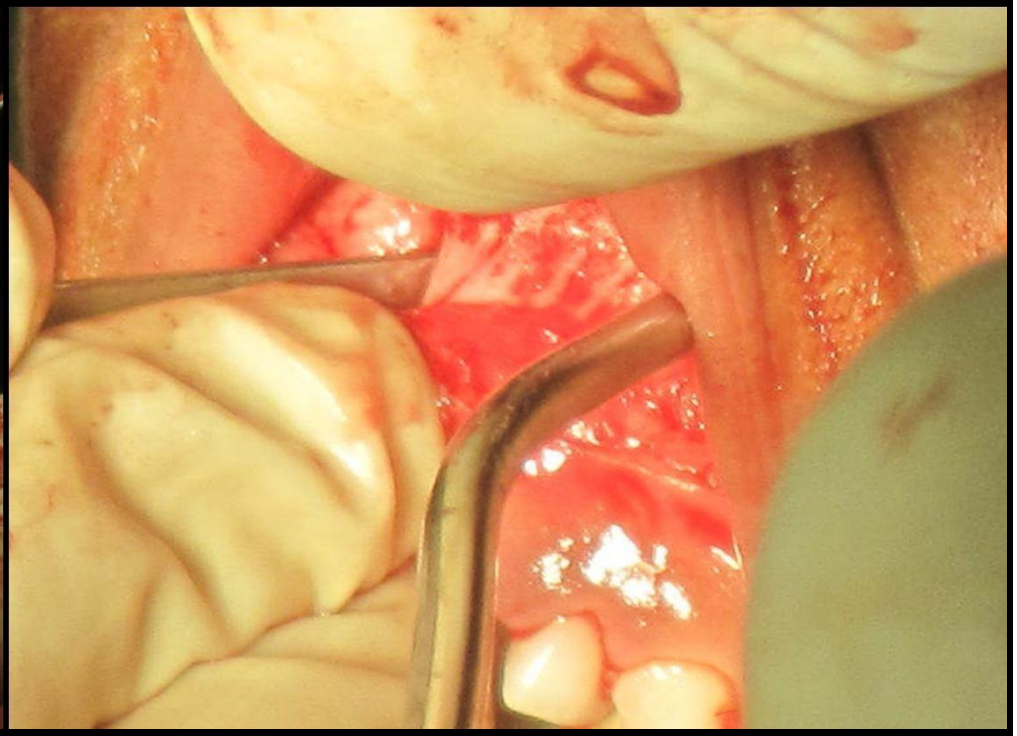
Lateral, Medial and Superior orbital osteotomies



- These osteotomies are done to separate the naso-orbital complex from the temporal and sphenoid bones and also the skull base
- Osteotomy is also done at the zygomatic bone.

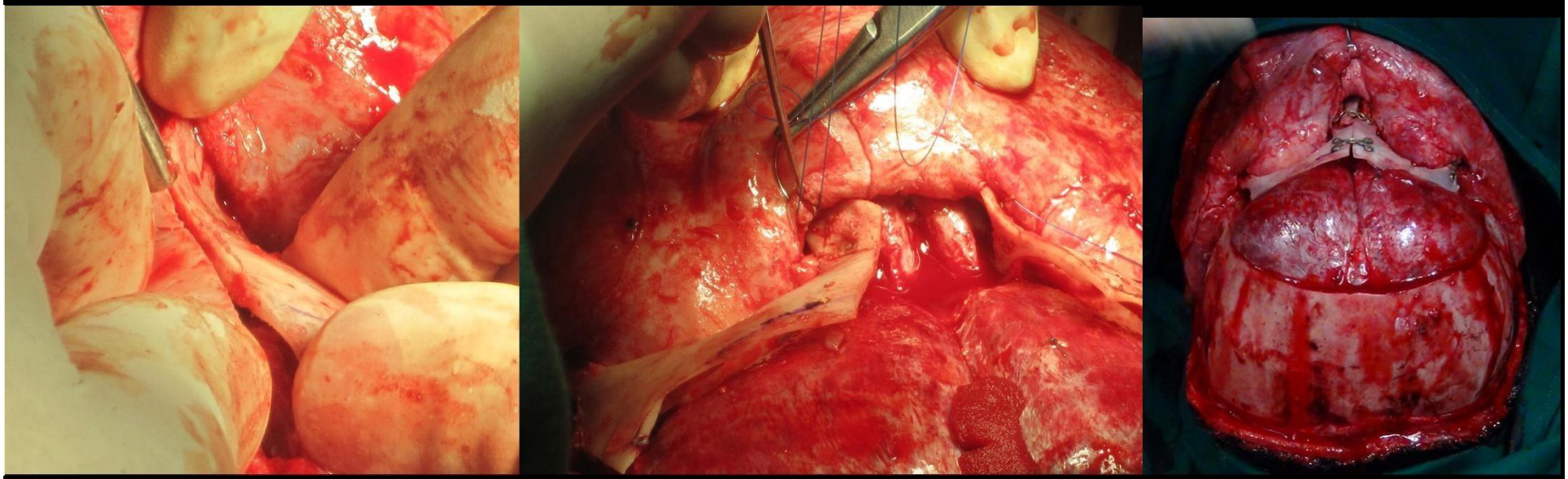
Pterygo-maxillary and mid palatine osteotomies



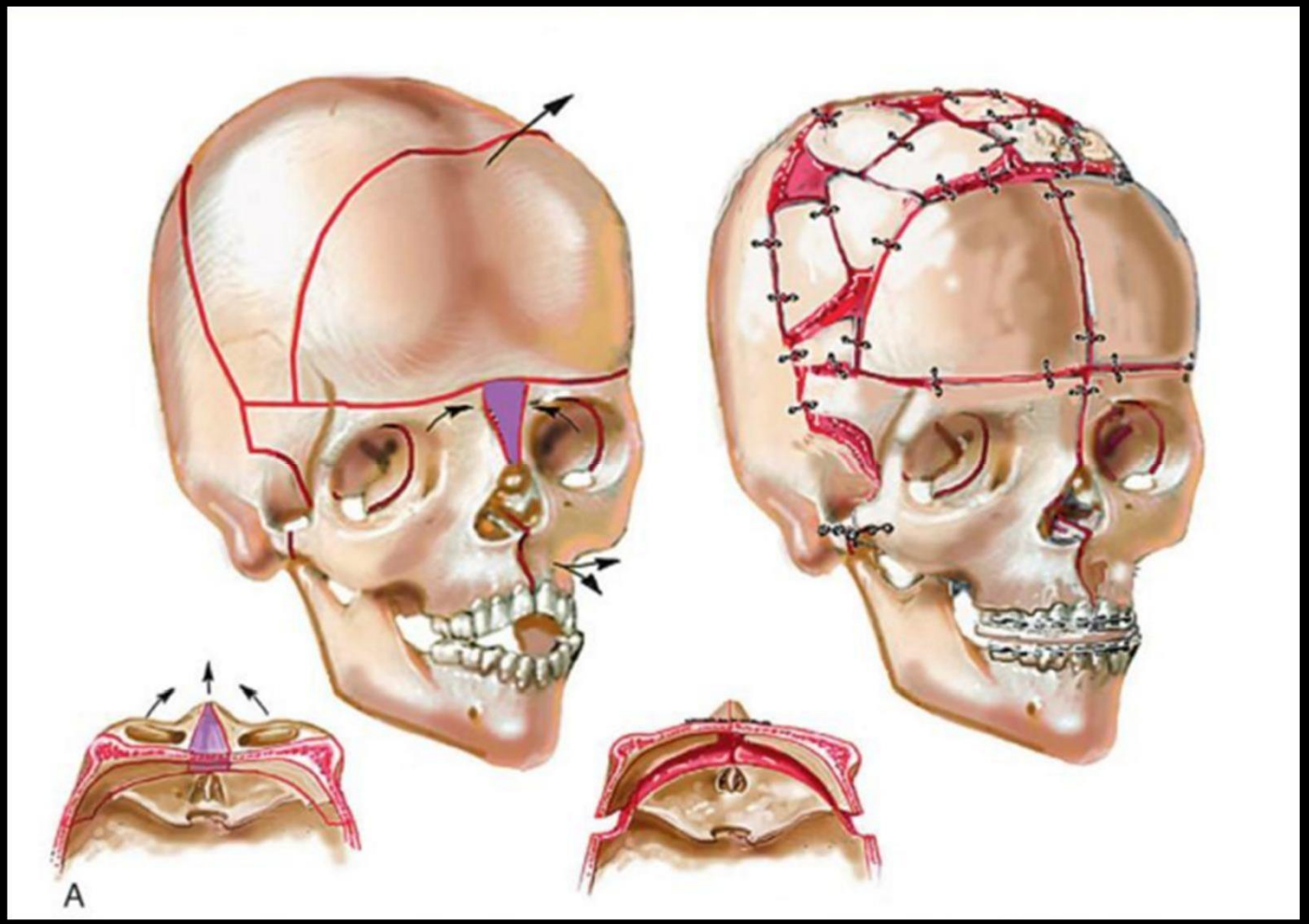


- Pterygo-maxillary osteotomy done to separate the zygomatico-maxillary complex from the pterygoid bone.
- Mid-palatine osetotomy is done to flatten the maxilla.

Approximation and fixation



- If the osteotomies are complete the segments will medialise with finger pressure
- Medial and lateral canthal ligaments are resuspended
- Fixation is done



Courtesy :
Kademani D, Tiwana P.Atlas of Oral and Maxillofacial Surgery , Elsevier Health Sciences - US; 1 edition. 2015

Monobloc

Indications

- To increase antero-posterior dimension of the cranio-maxillary complex

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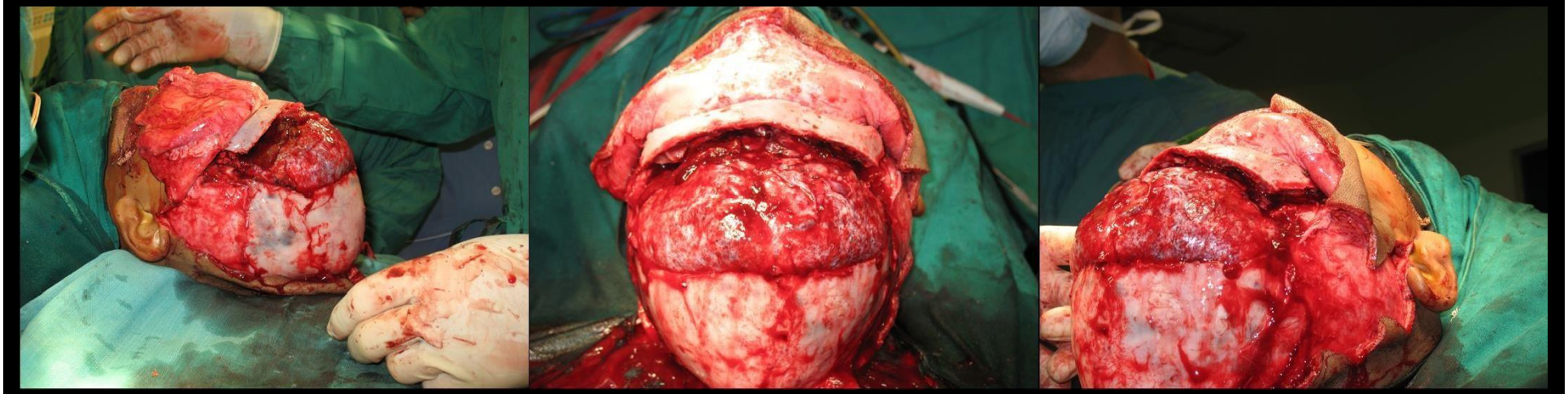
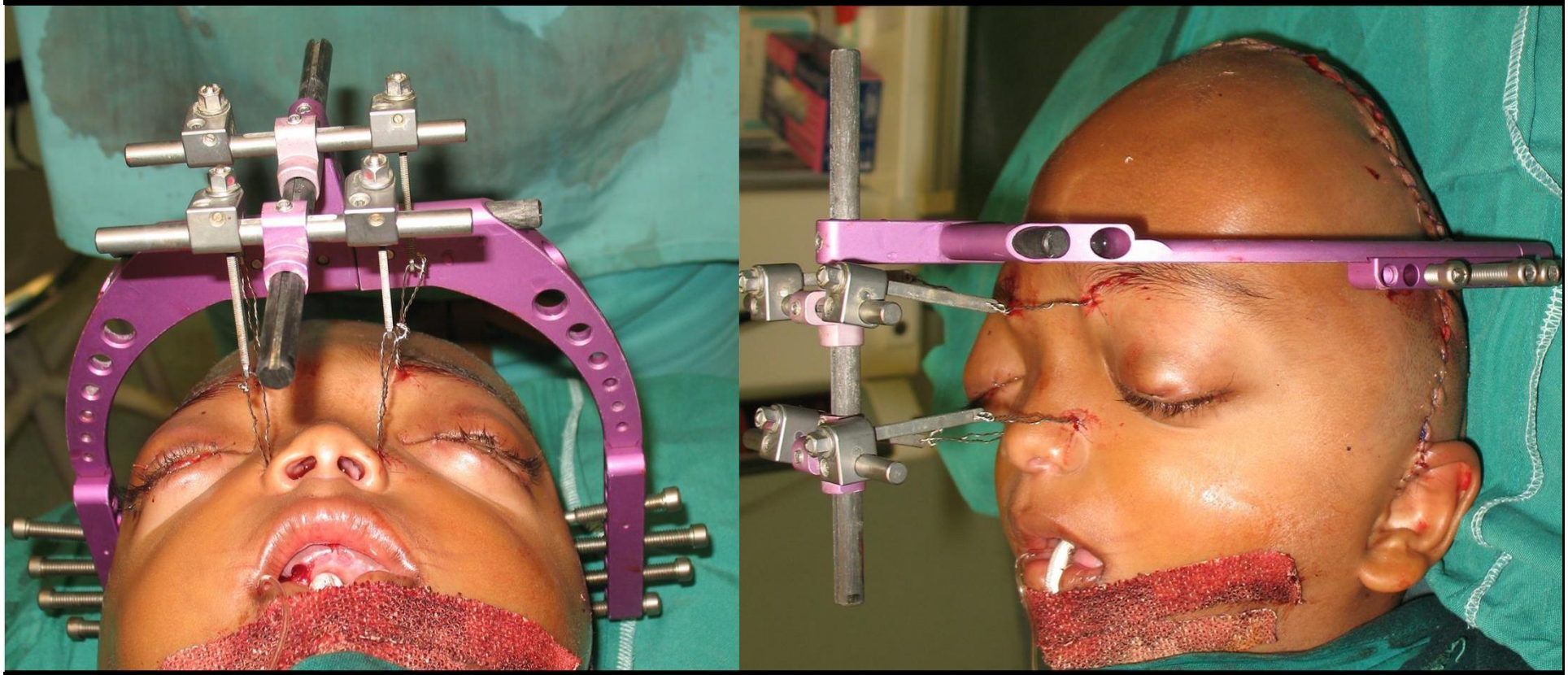
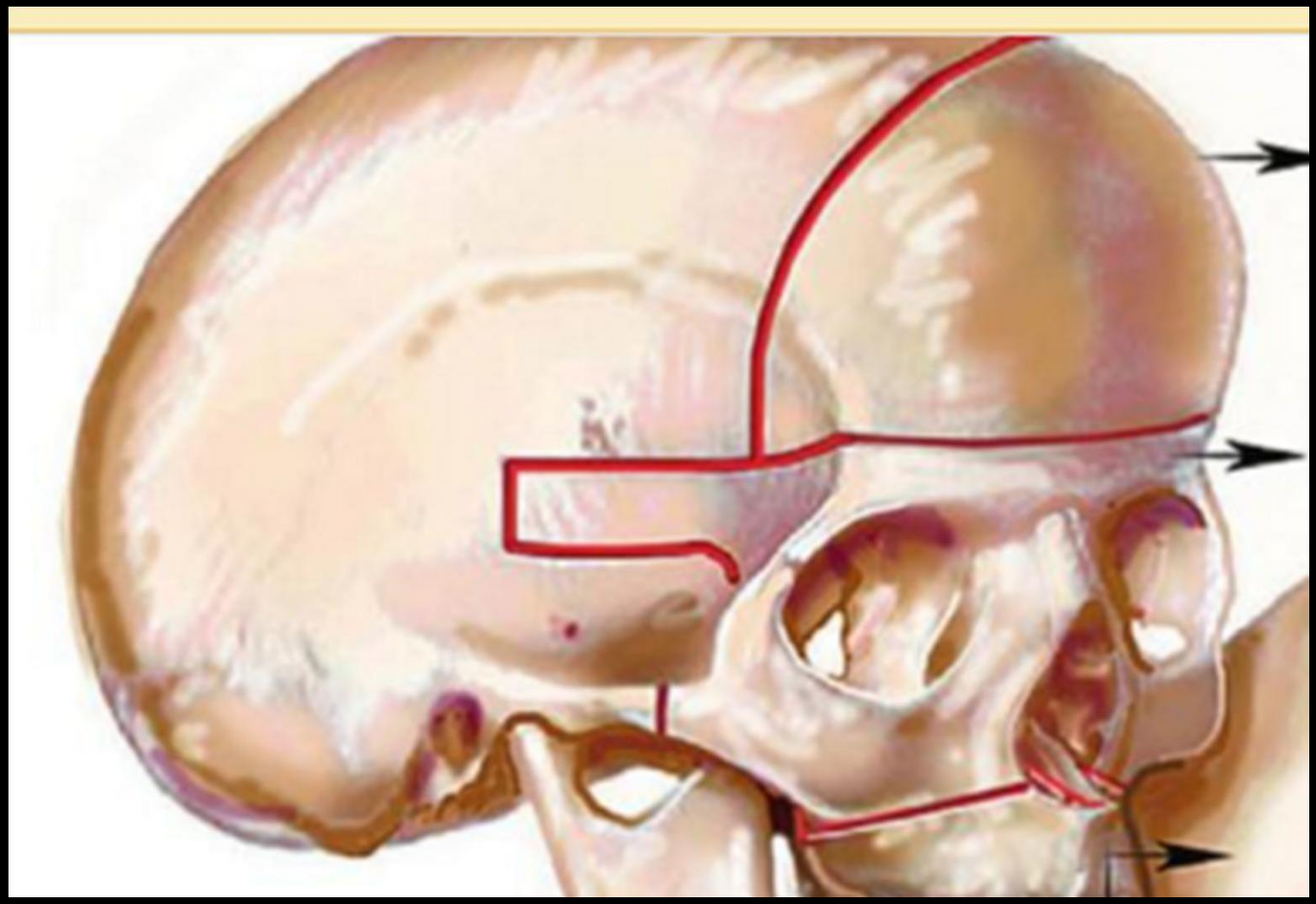
- The exposure the same as that is done for facial bipartition



- The lateral osteotomies are same as those done for facial bipartition.
- No medial cuts are given ensuring that the osteotomised complex is moved antero-posteriorly as a single block



- Distractor in place
- Distraction was preferred because of the amount of movement required, the dead space the movement would have resulted in and poor quality of bone alreadypresent.



Courtesy :
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Bring the Smile Back

Thank You

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