Monobloc and Facial Bipartition Osteotomies

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- 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 25,000 cleft & craniofacial surgeries have been performed since 1996
- 600 primary new born cleft children are treated every year
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:
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
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 osteotomy** 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:
Monobloc

Indications

• To increase antero-posterior dimension of the cranio-maxillary complex
• 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 already present.
Courtesy:
Bring the Smile Back

Thank You

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