



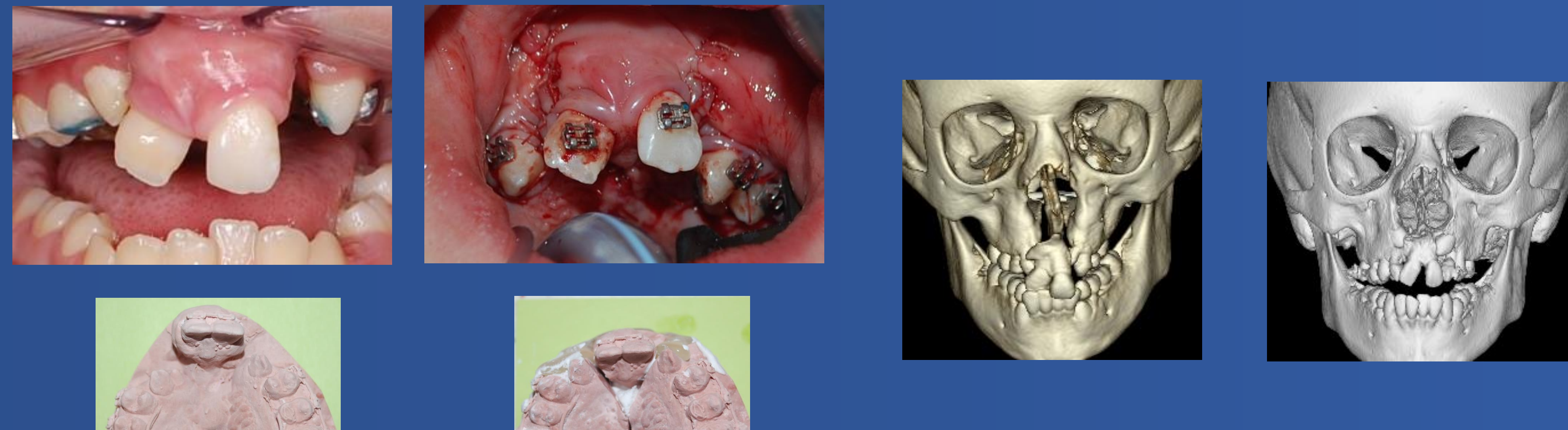
Complex bilateral alveolar clefts solved in one operation: Premaxillary osteotomy with simultaneous bone grafting in 25 consecutive patients



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Background:

- Effective bilateral alveolar cleft grafting is a challenge to the cleft surgeon.
- Patients often have multiple failed attempts at grafting with residual fistulae and compromised anterior teeth.
- It is the purpose here to present outcomes of a group of consecutive patients with bilateral cleft lip and palate who underwent simultaneous pre-maxillary osteotomy and bilateral bone grafting.

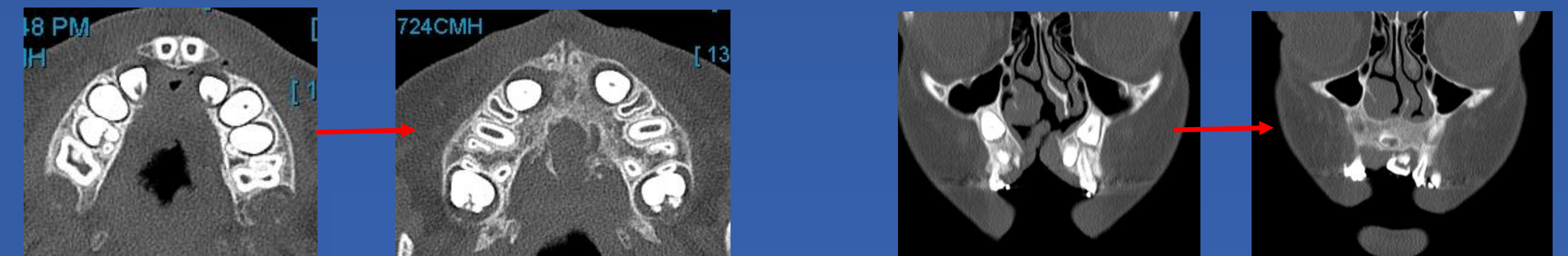


Methods:

- Retrospective review of bilateral cleft lip and palate patients (2015-present) with a mal-positioned premaxilla and un-grafted alveolar clefts , who underwent premaxillary osteotomy and simultaneous bilateral alveolar cleft grafting.
- CT scan preoperatively and 6 months postoperatively.

Results:

- 25 consecutive patients, age range was 7 - 18 years.
- Follow up ranged from 6 months to 6 years.
- **22/25 had successful grafts on both sides.**
- 3/25 had union on one side only.
- Excluding the three unilateral failures, **volume fill approximated 70 percent.**
- *There were no cases of premaxillary necrosis.*
- *There were no residual fistulae.*



Conclusions:

- Premaxillary osteotomy with simultaneous alveolar bone grafting is a highly effective procedure to achieve a consolidated maxillary arch in one operation, with few complications.
- Judicious use of premaxillary osteotomy, when necessary:
 - *Properly positions misaligned segments*
 - *Allows closure of anterior palatal fistula*
 - *Affords improved access for surgery*