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CLEFT LIP NOSE

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SECONDARY UNILATERAL CLEFT NASAL DEFORMITY

Primary nasal deformity

Vs

Secondary established deformity

Analysis of the PRIMARY nasal deformity ---- important lessons for understanding and correcting the SECONDARY nasal deformity

Lesson 1

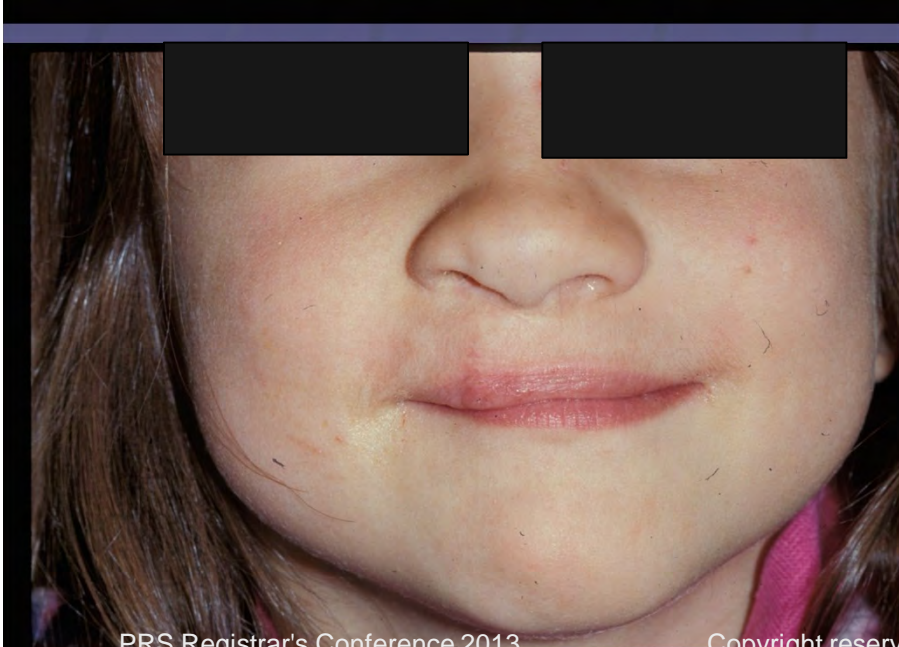
- Primary nasal deformity is produced by the **NASAL LINING** being stuck in the cleft

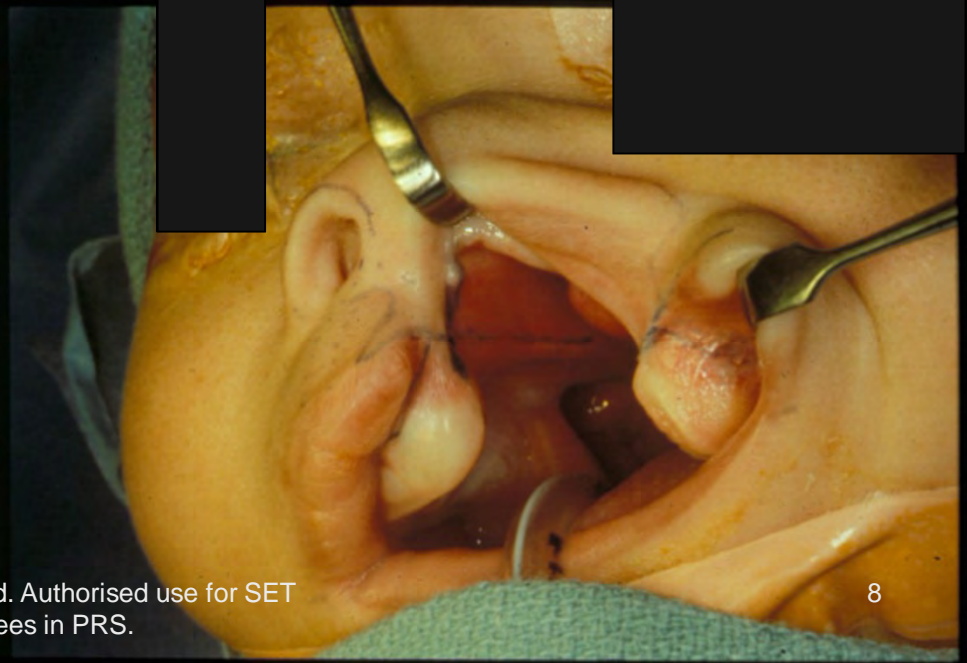
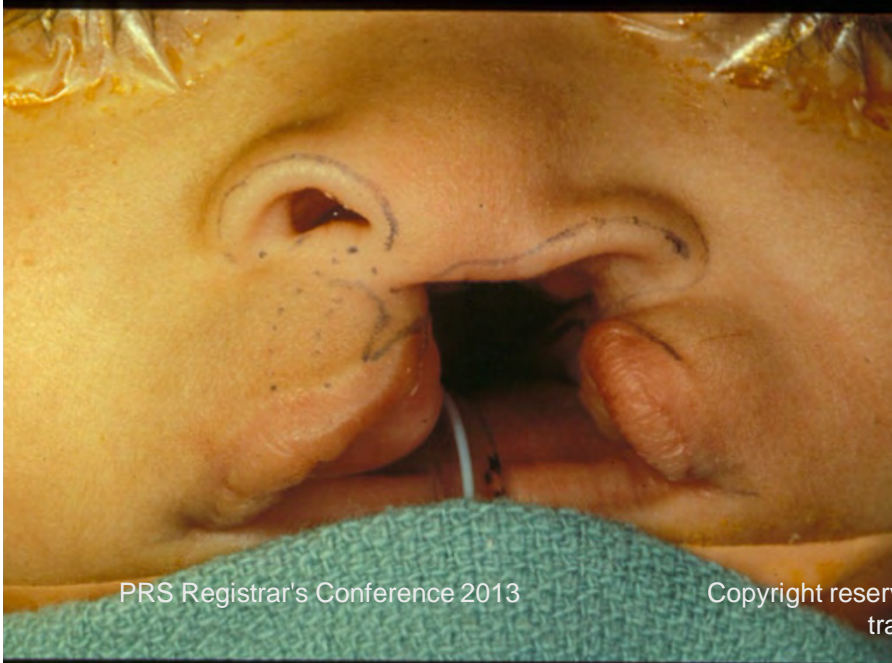
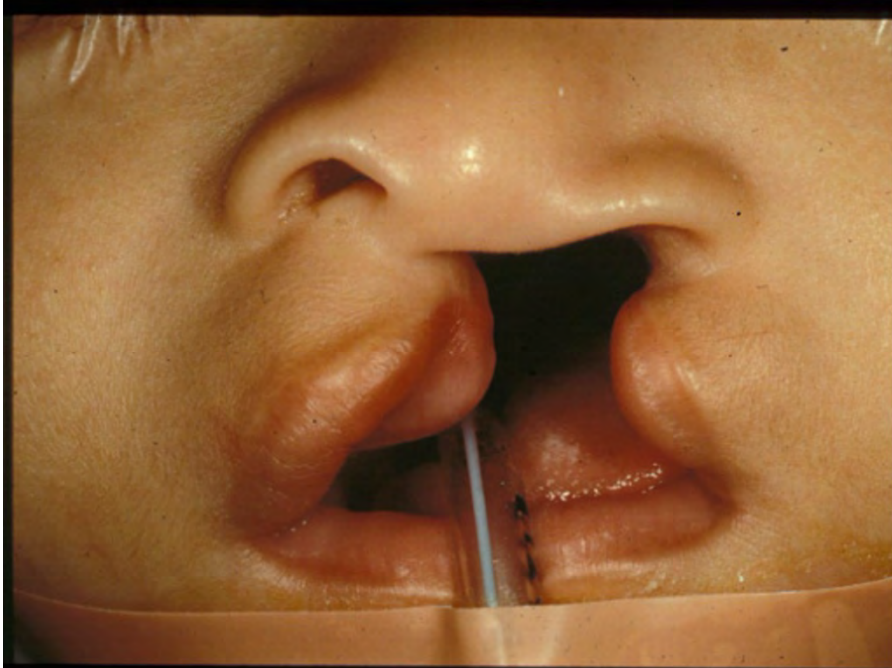


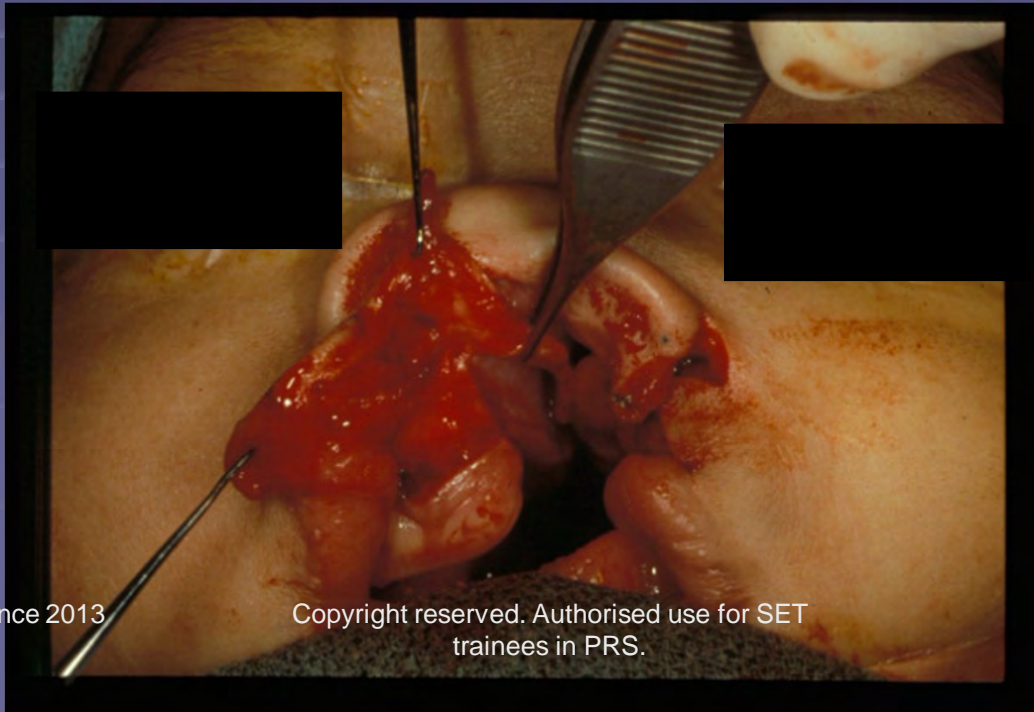
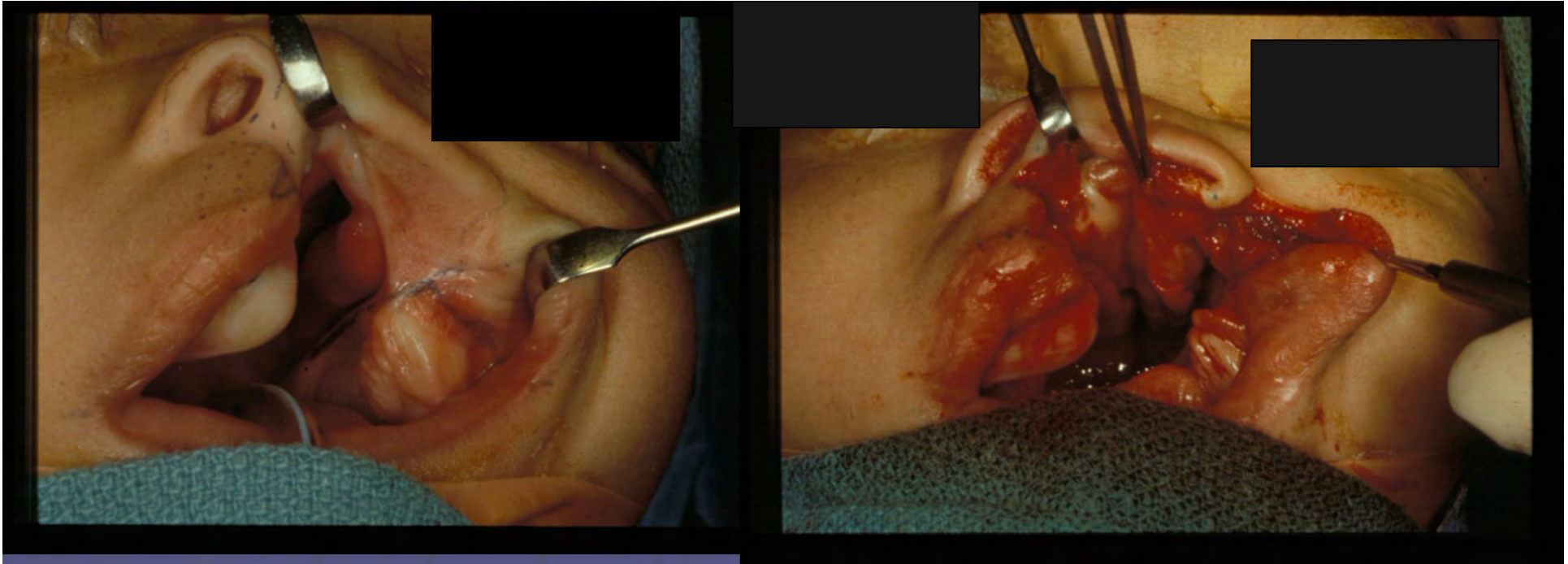
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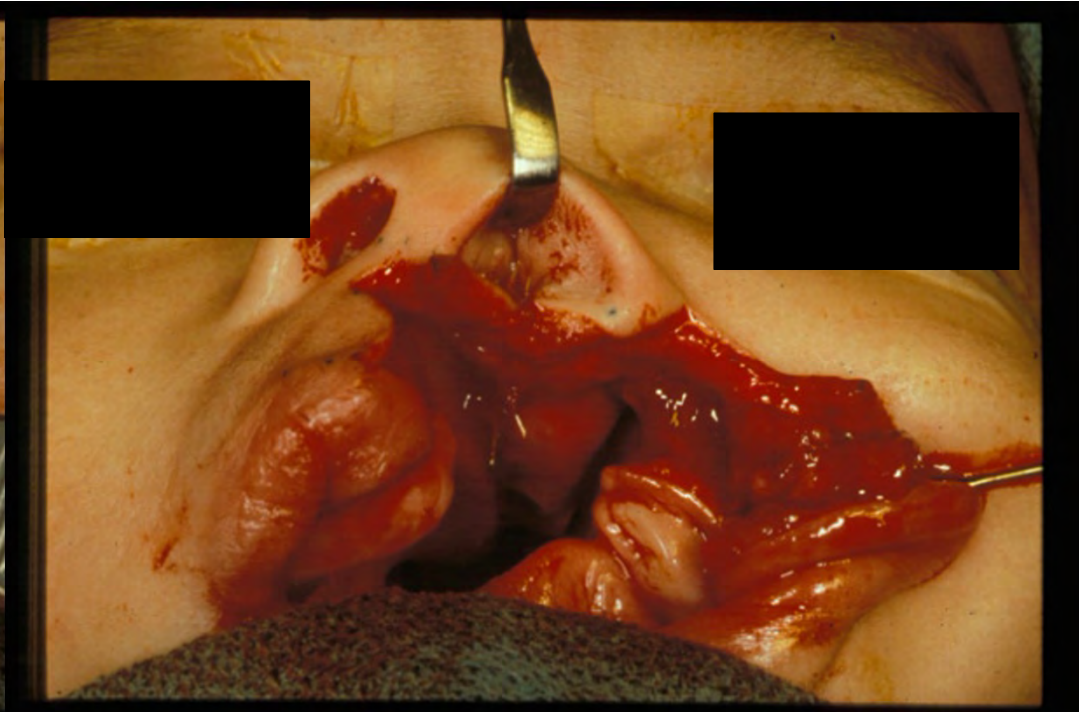
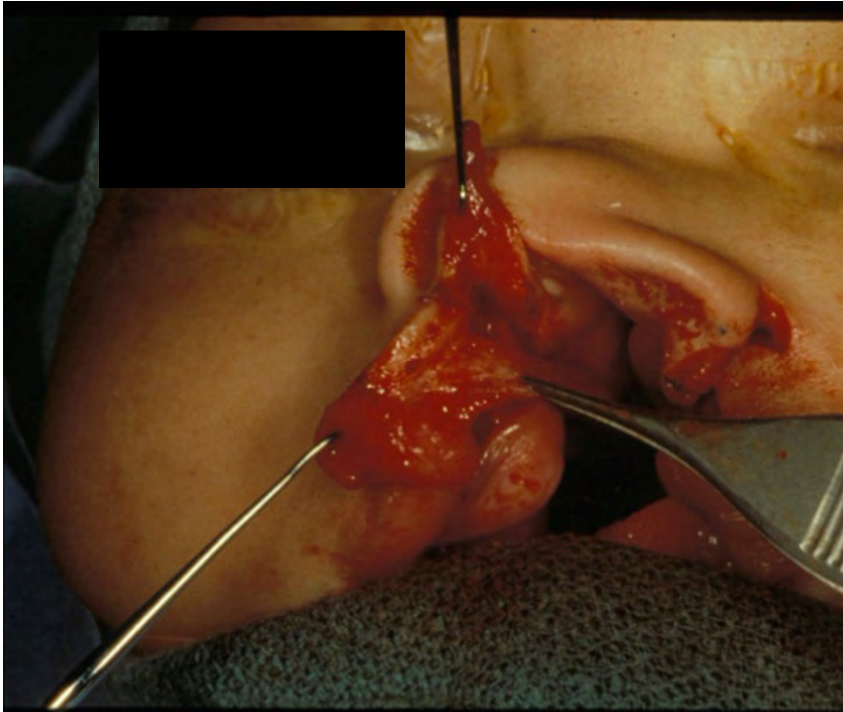
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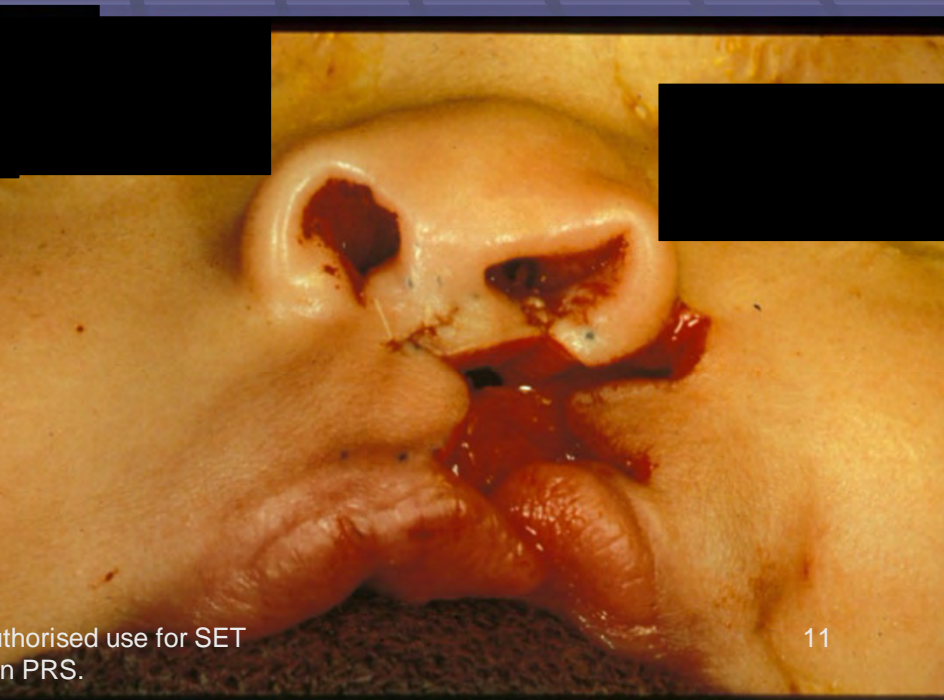
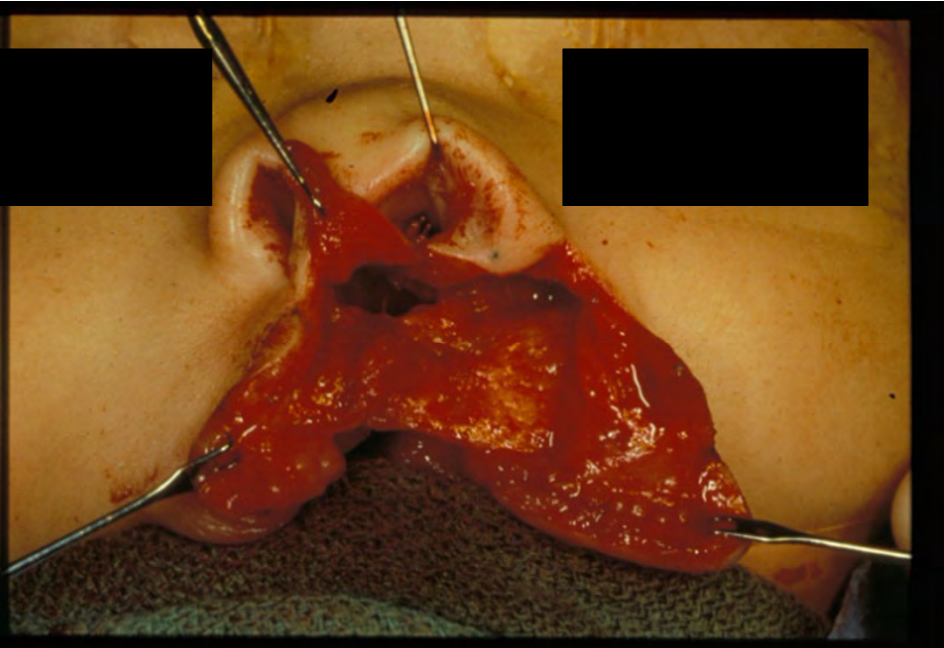
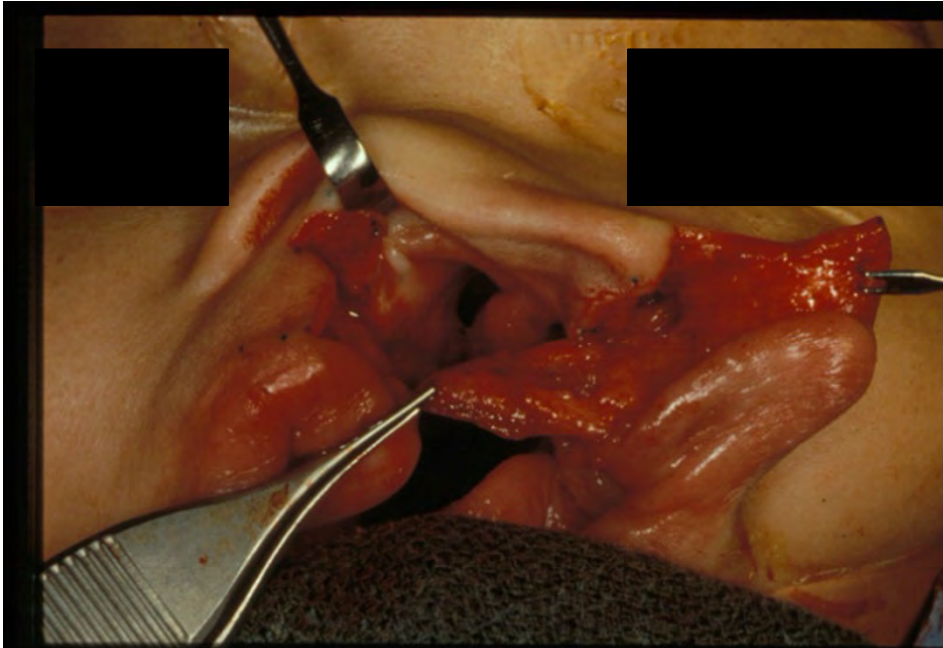












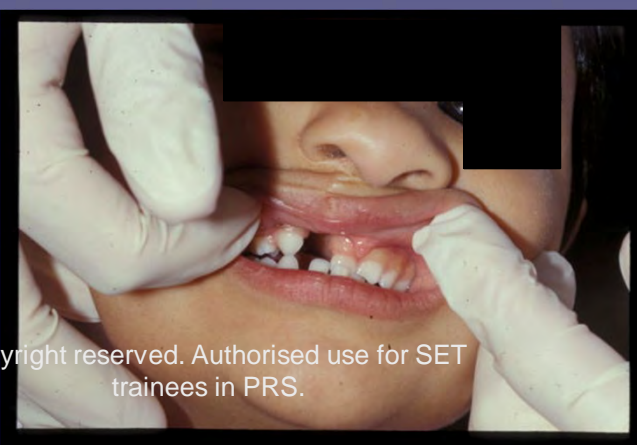


18yr follow up



Lesson 2

- Misconception
 - Alar base depression is due to the bone gap from the alveolar cleft
 - Can only be corrected by bone grafting the cleft to support the alar base





Lessons 1 & 2 – secondary deformity

- Lining not released at primary correction
 - Need to wait until after ABG for secondary correction
 - Ideal age is 10-14 yrs

Lesson 3

- Primary alar cartilage is normal
- Secondary deformity
 - Becomes weak and hypoplastic
 - Loses its natural spring

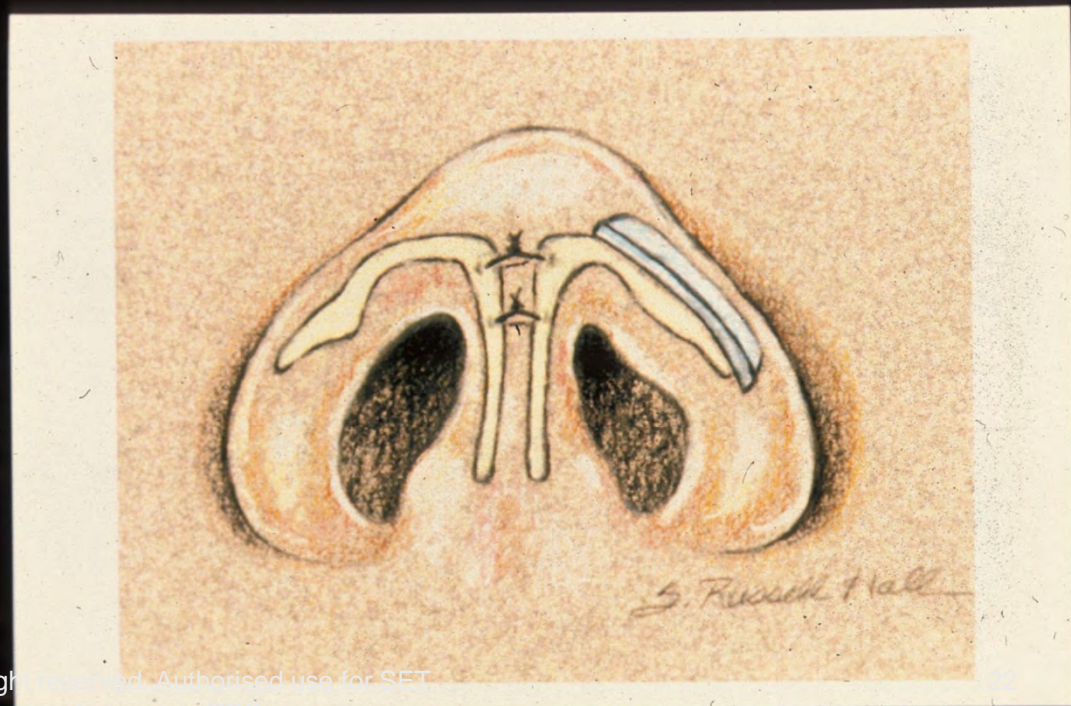
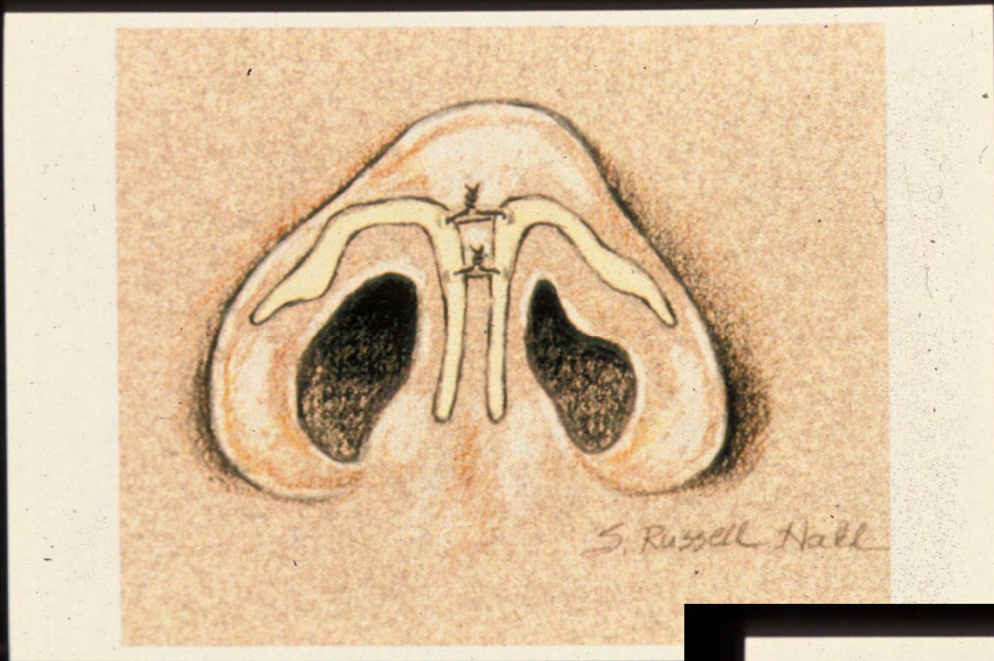


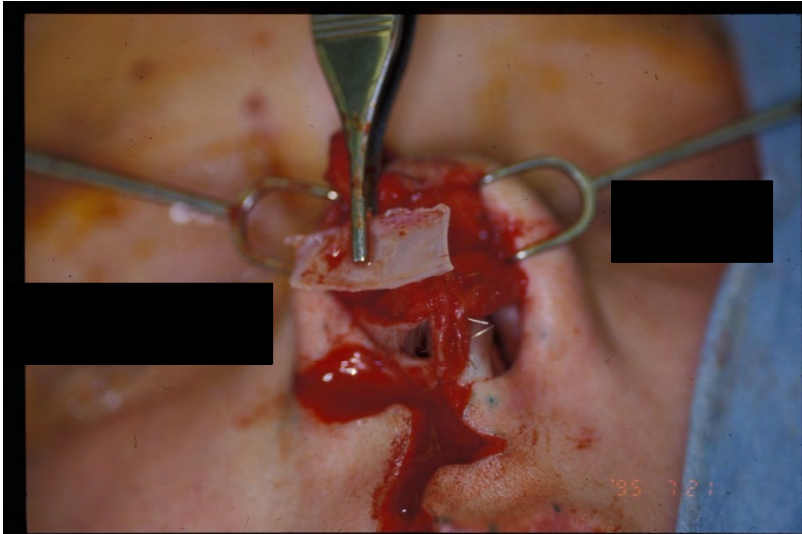
Lesson 3 –secondary deformity

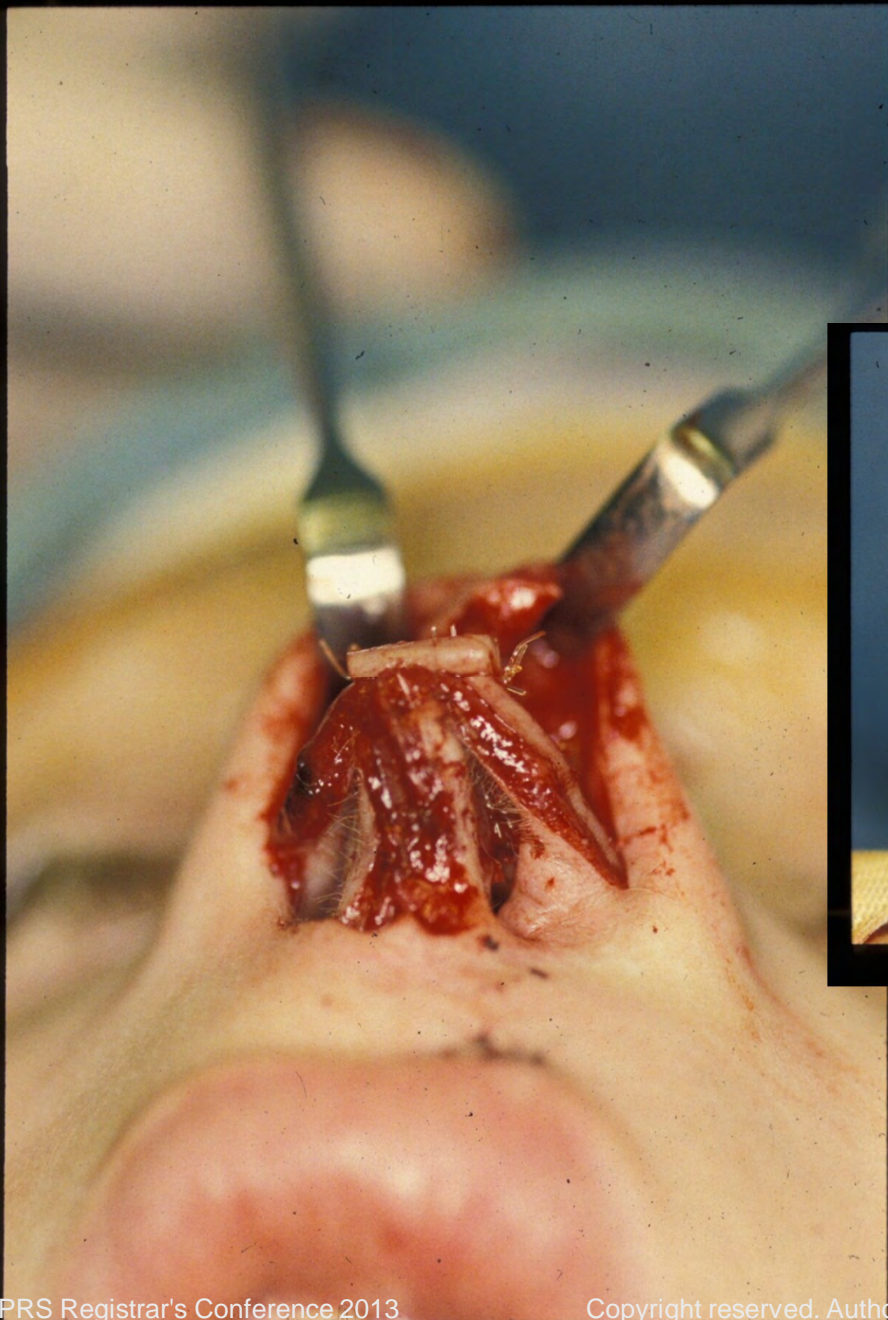
- Weak alar cartilage
 - Attempts at repositioning/manipulating inadequate
 - Need strong cartilage graft to support alar cartilage [BUTTRESS GRAFT]

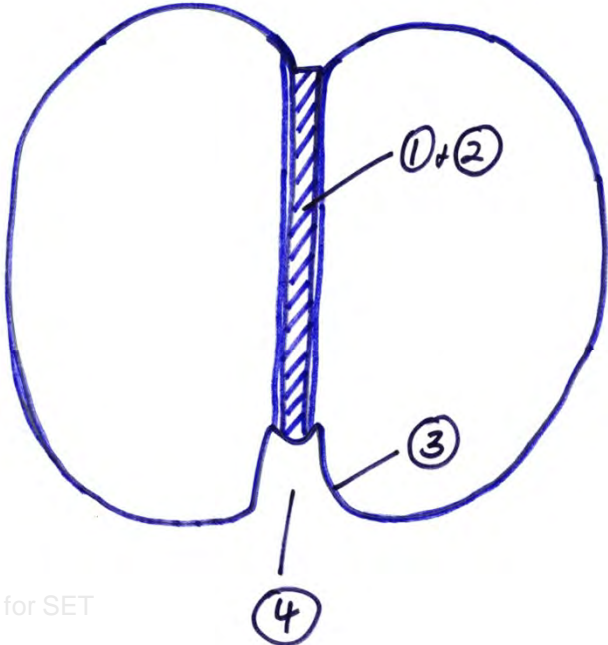
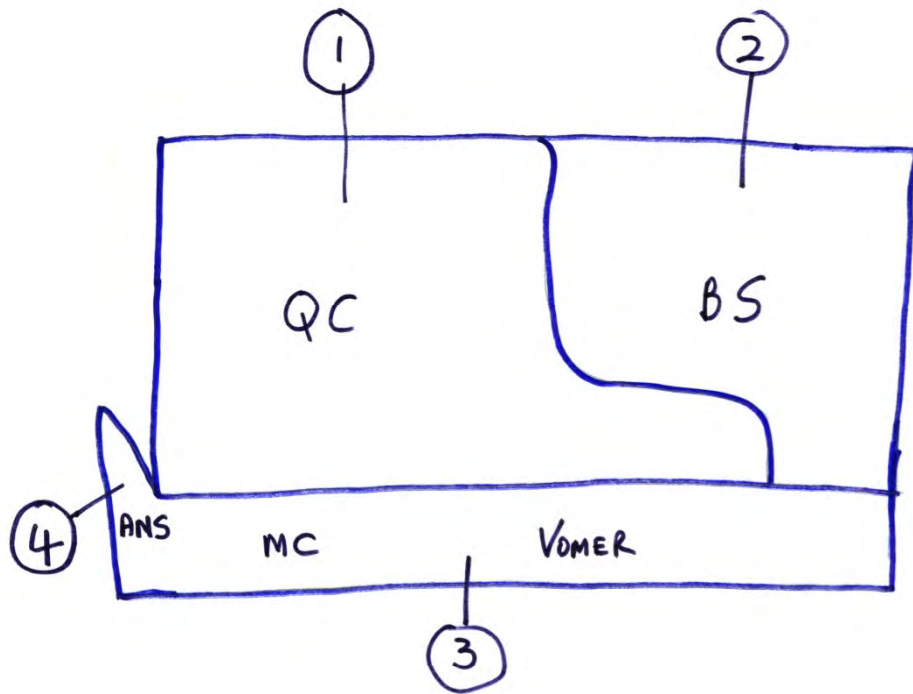
Reconstruction of secondary nasal deformity

- Analagous to microtia reconstruction
 - EXPANSILE FRAMEWORK
 - Alar buttress graft
 - Columellar strut
 - Tip grafts









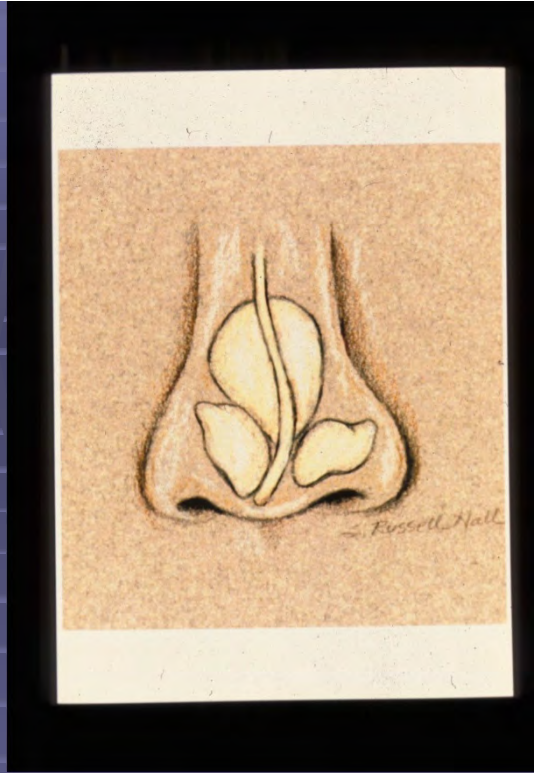
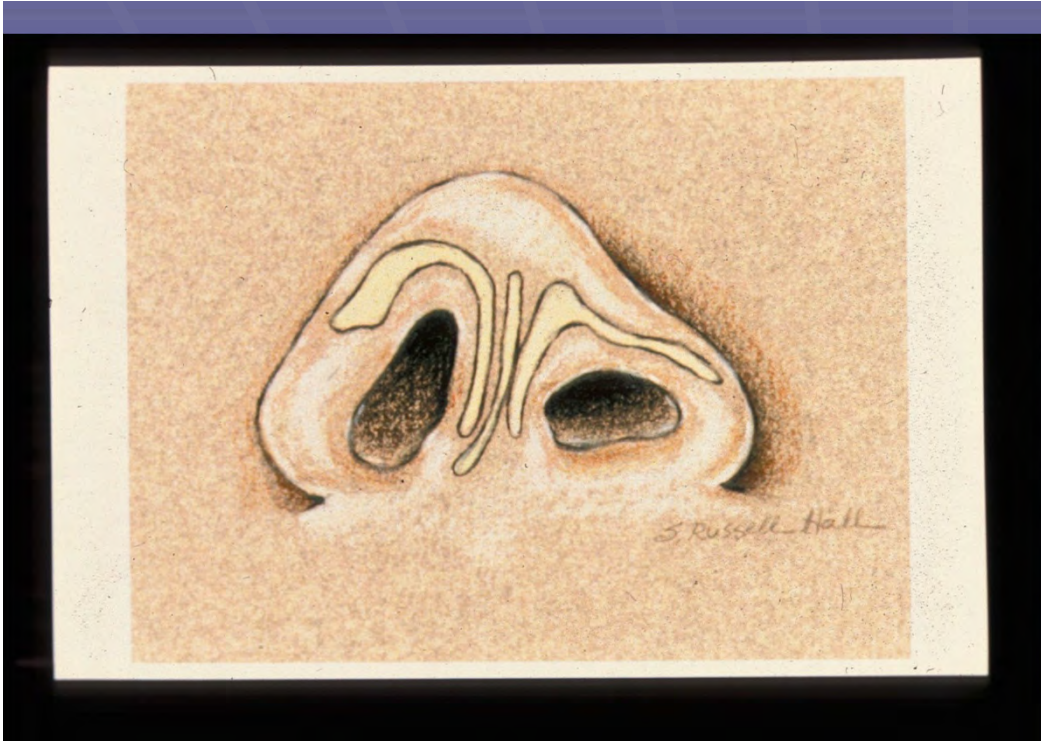
Lesson 4

- Malpositioned lip and cheek muscles
 - Important deforming forces on nose
 - Lip revision with muscle repair necessary

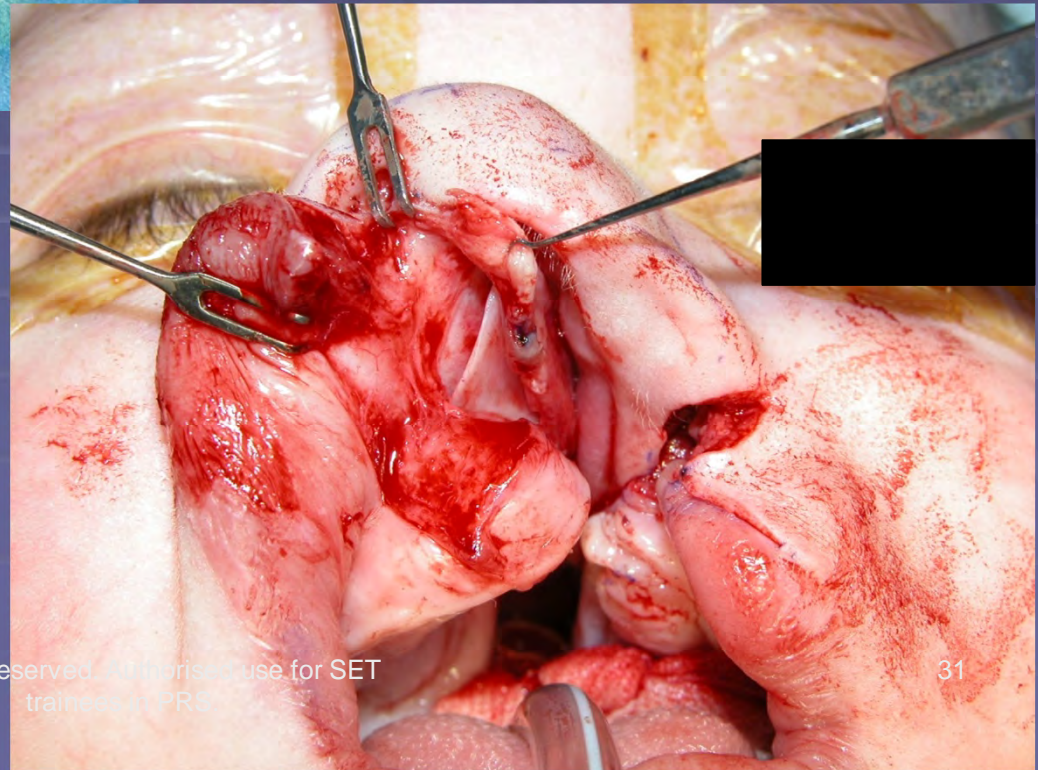
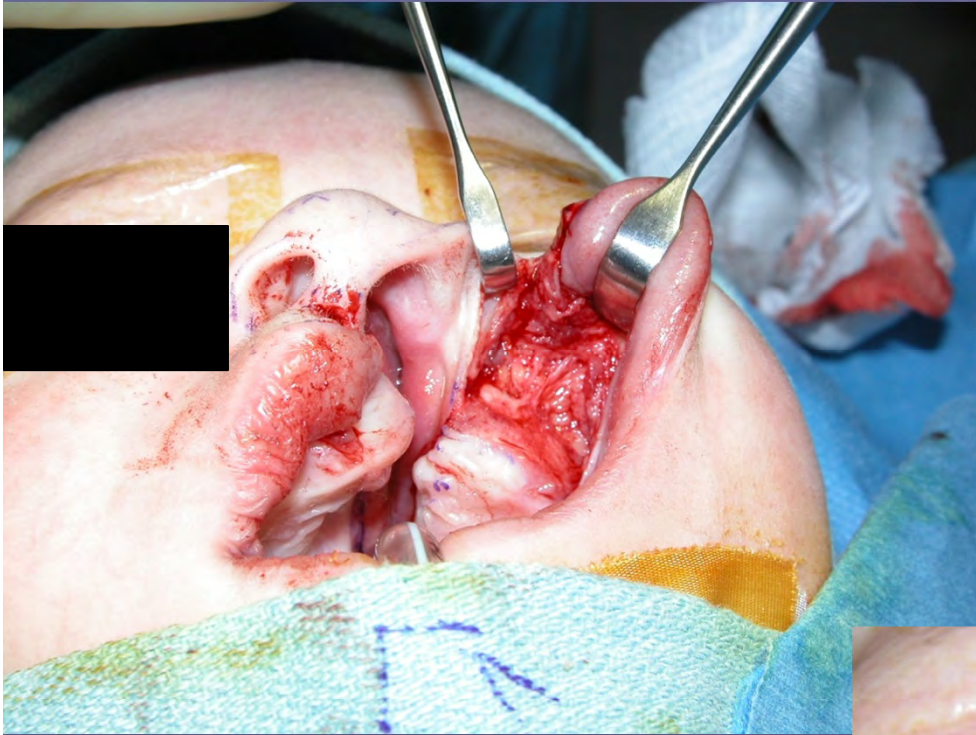


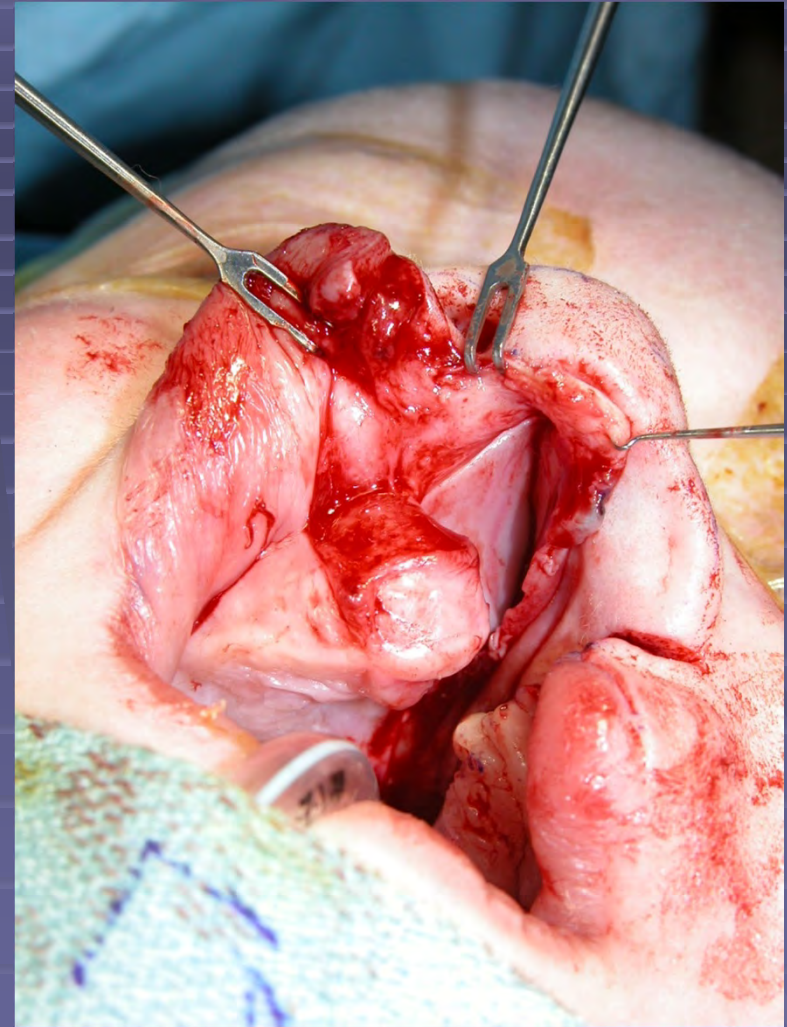
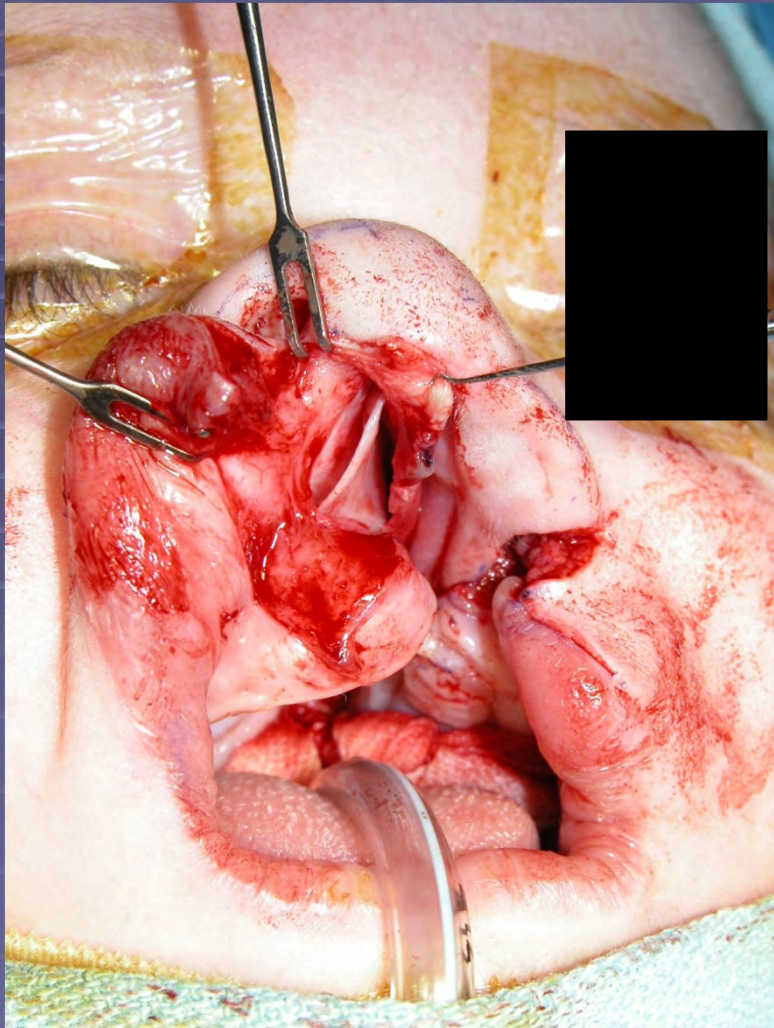
Lesson 5

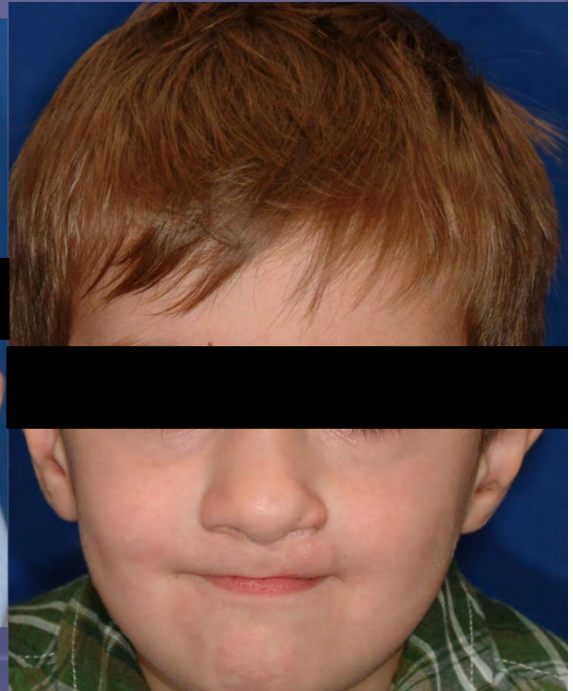
- Nasal septal deviation important component of deformity
 - Essential to straighten and reposition septum
 - SEPTOPLASTY

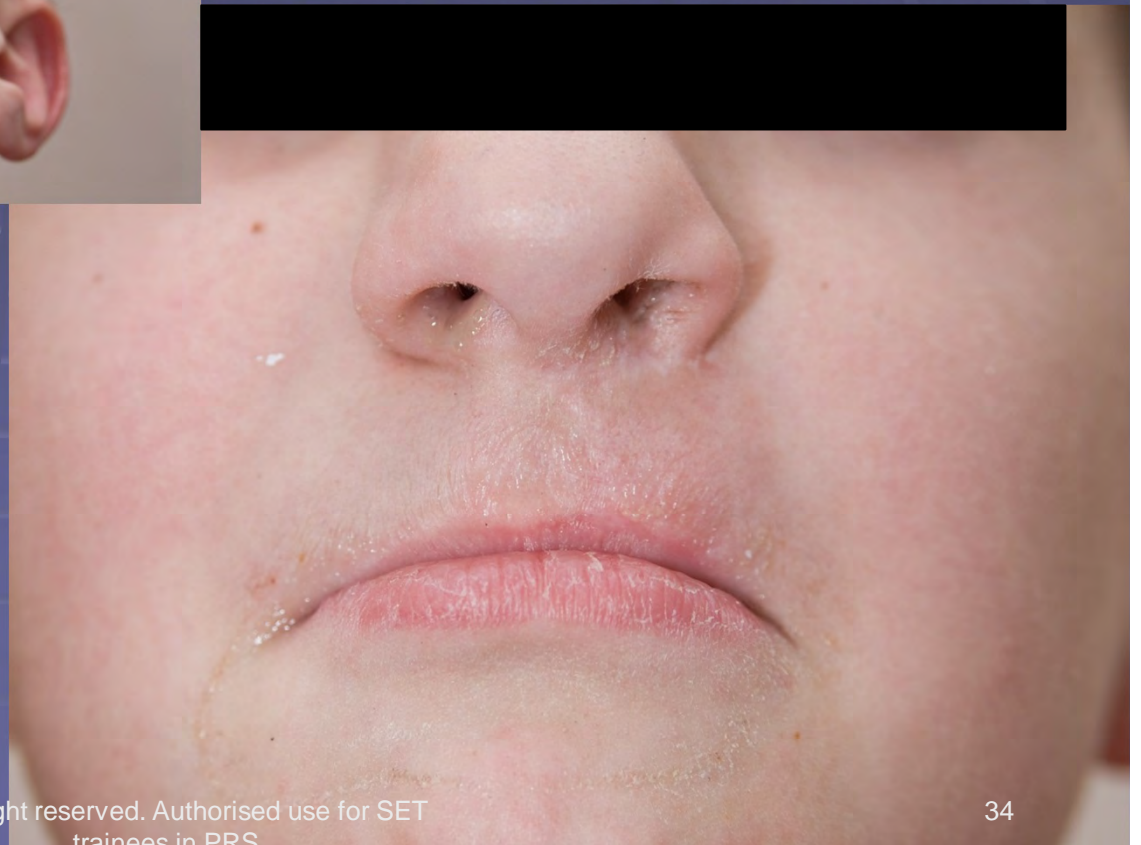




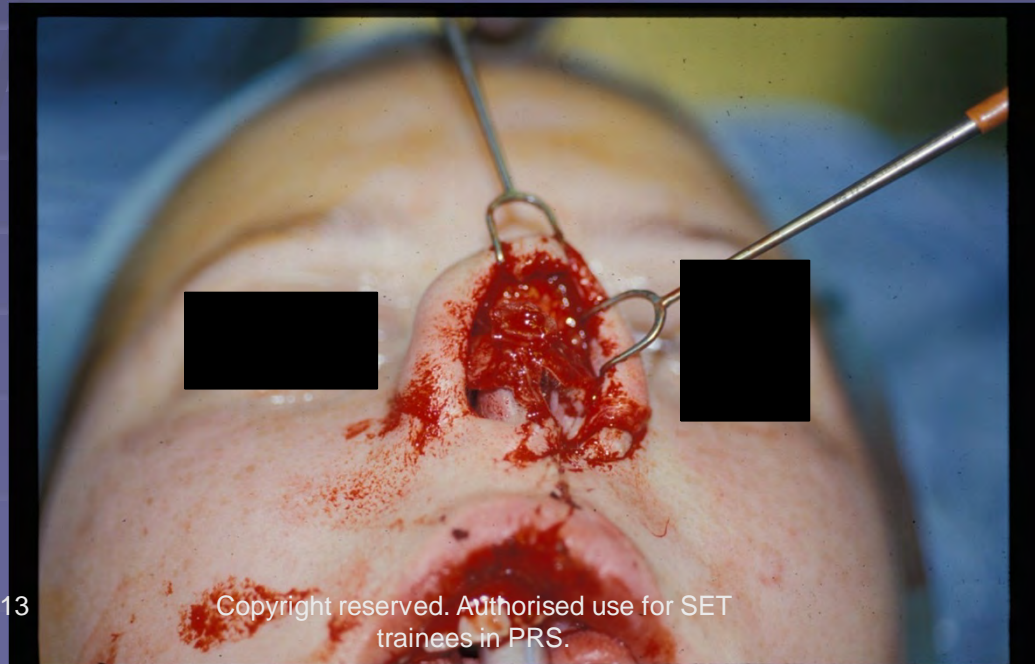
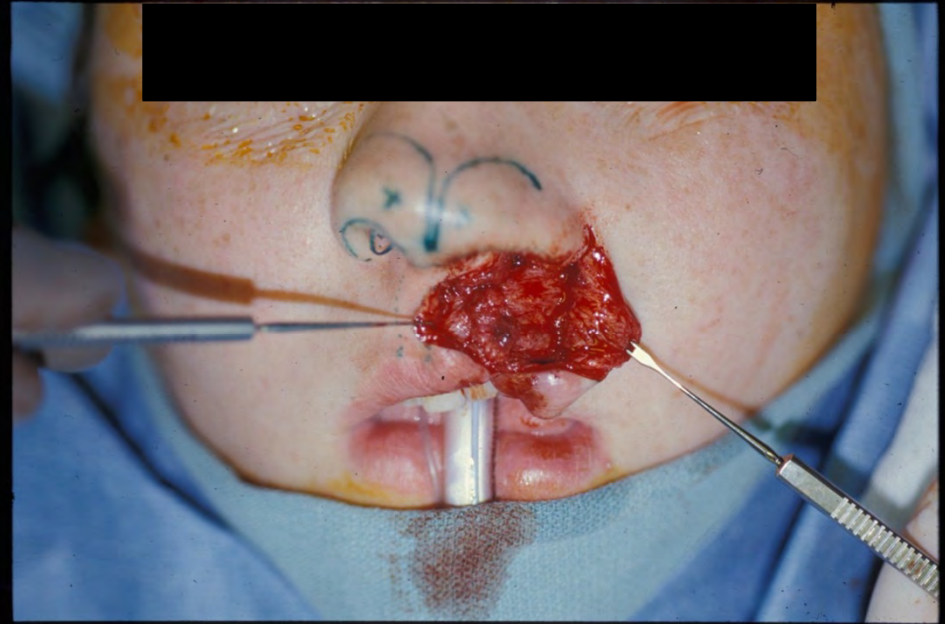
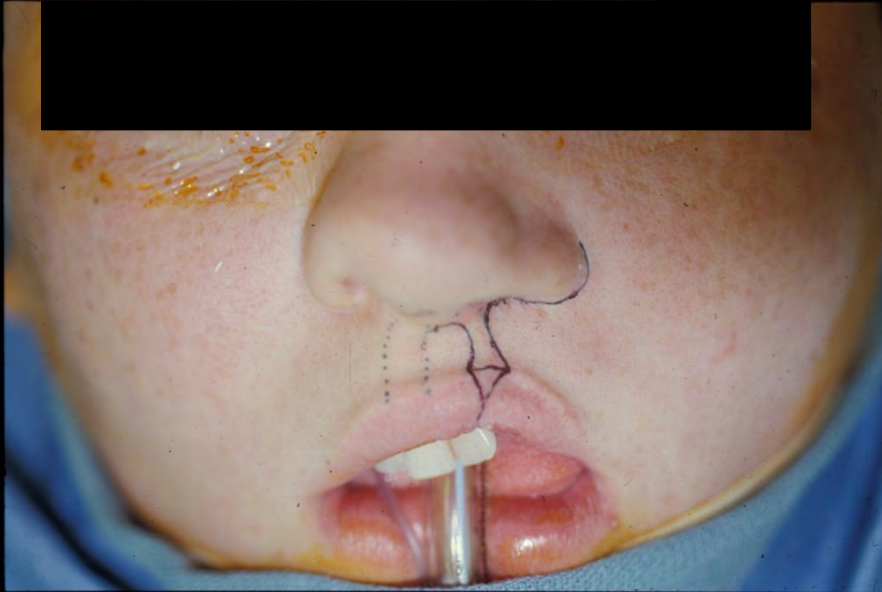














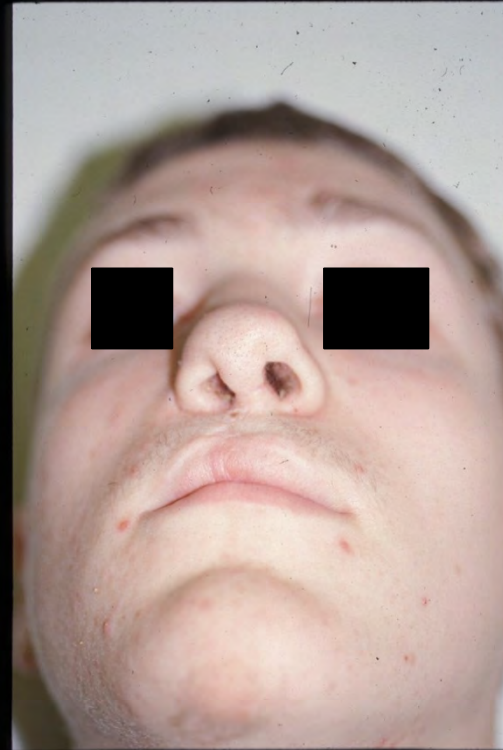


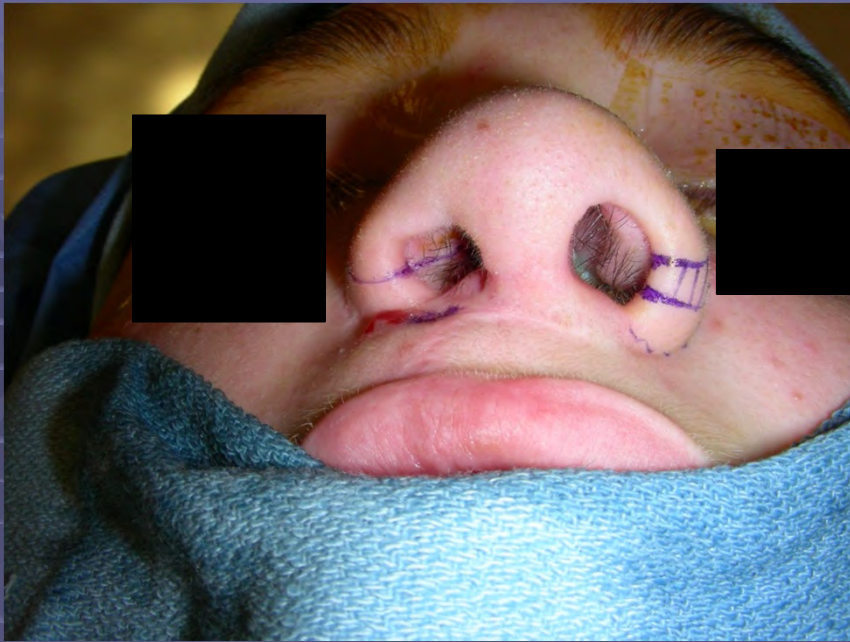
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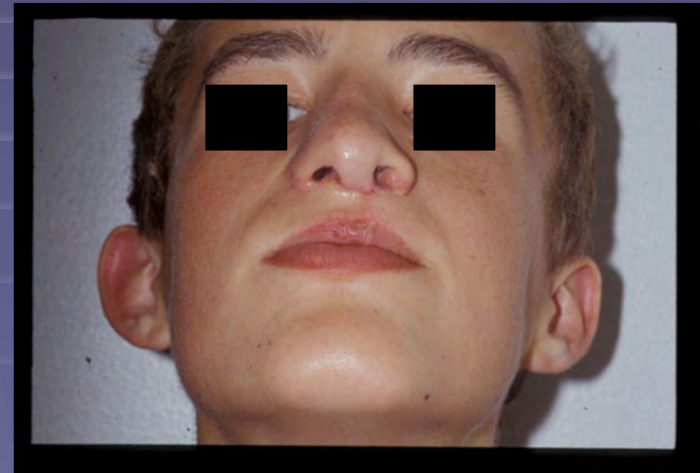
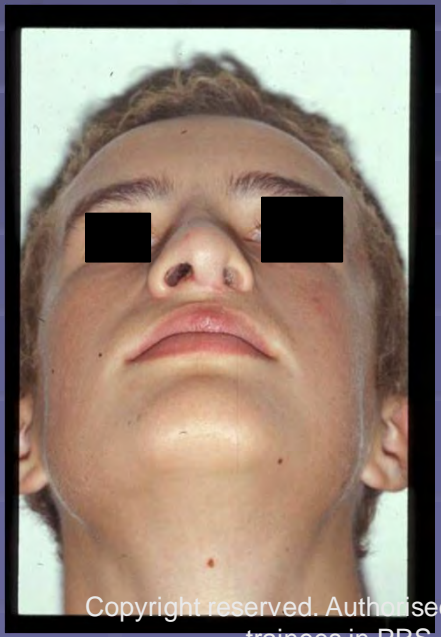
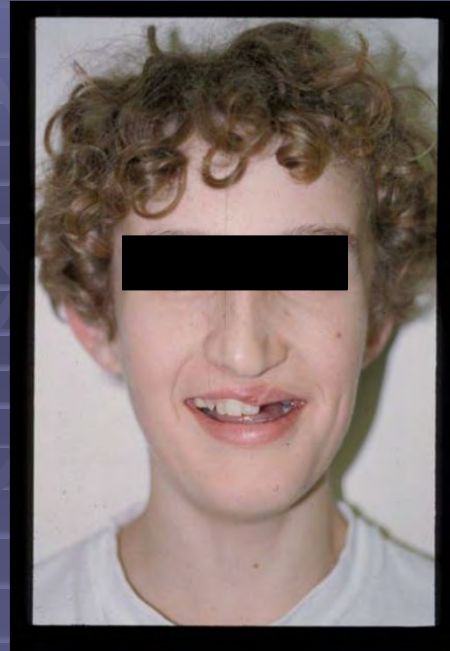
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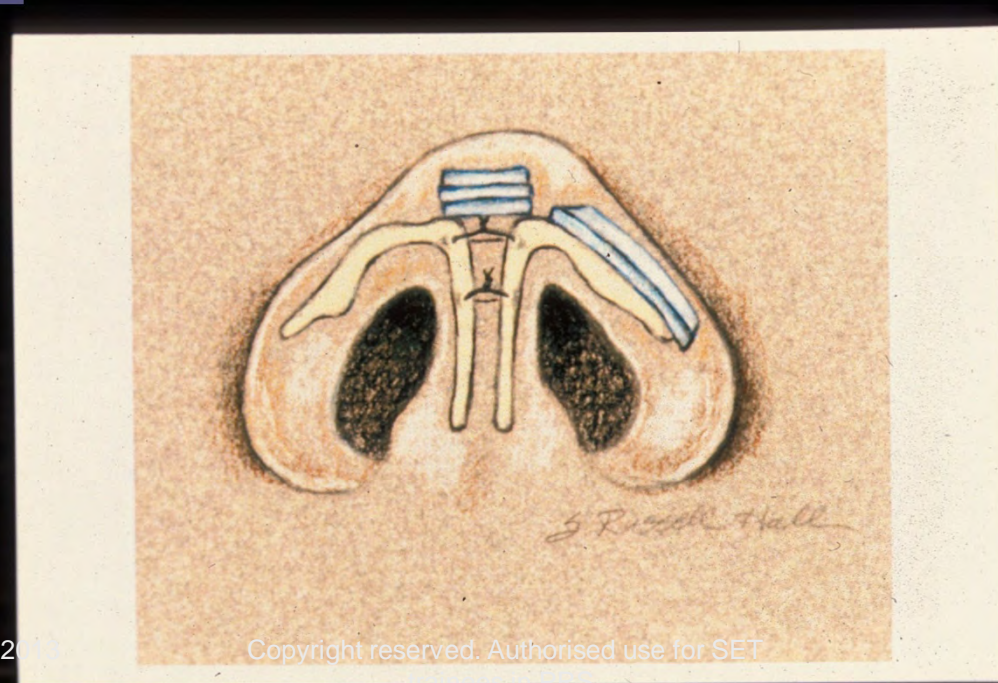
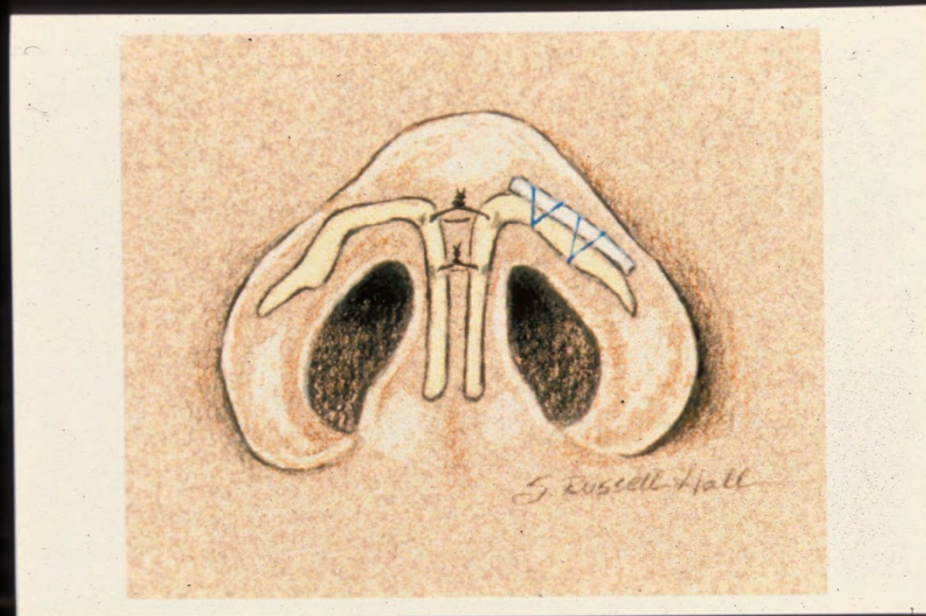






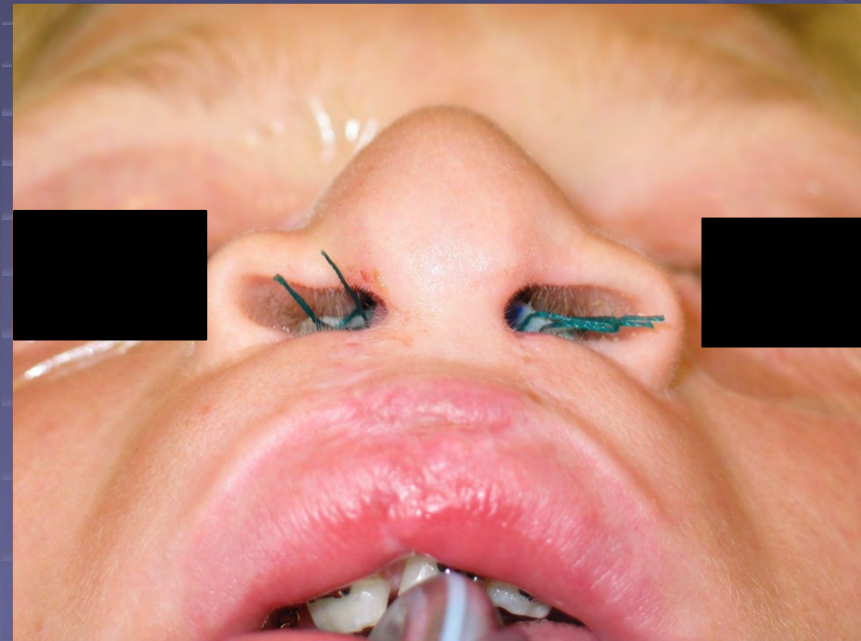
Lessons learnt from primary cleft nasal deformity and correction

Applied to secondary NASAL
correction



Bilateral Cleft Nose

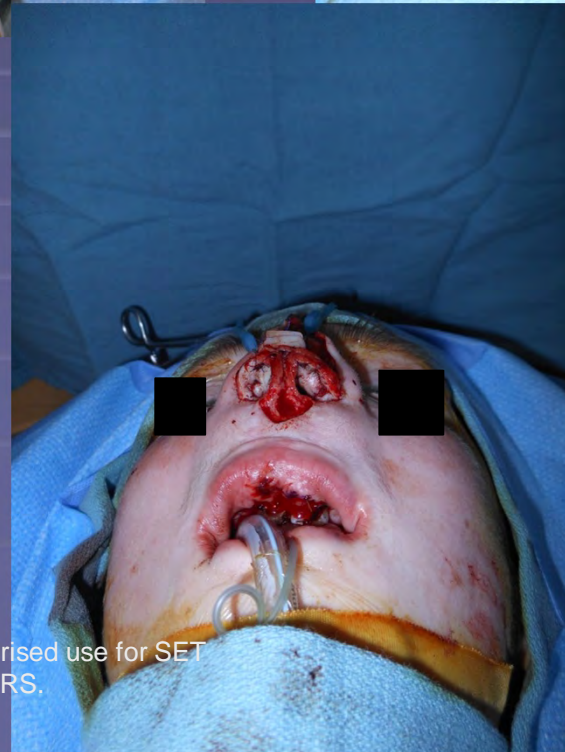
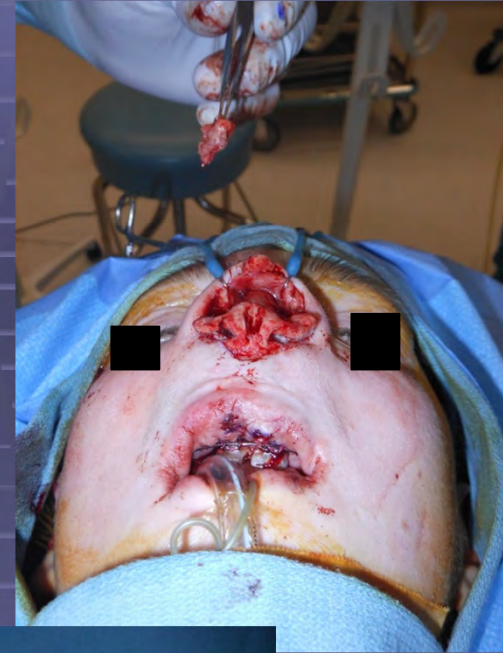
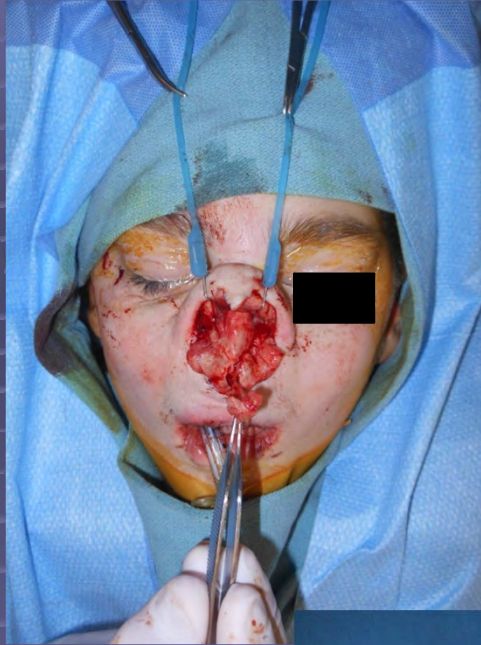
- Flat tip
- Alar domes splayed
- Weak/buckled lateral crus
- Short columella
- Wide alar bases



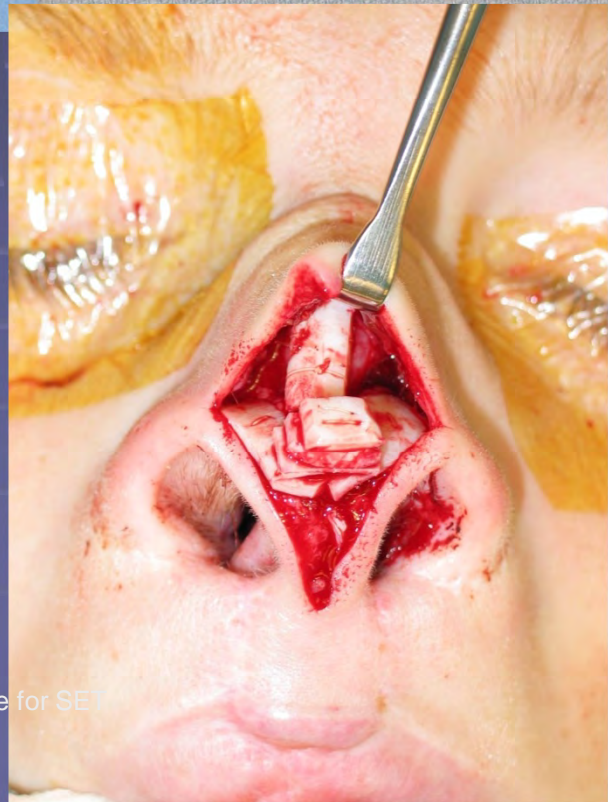
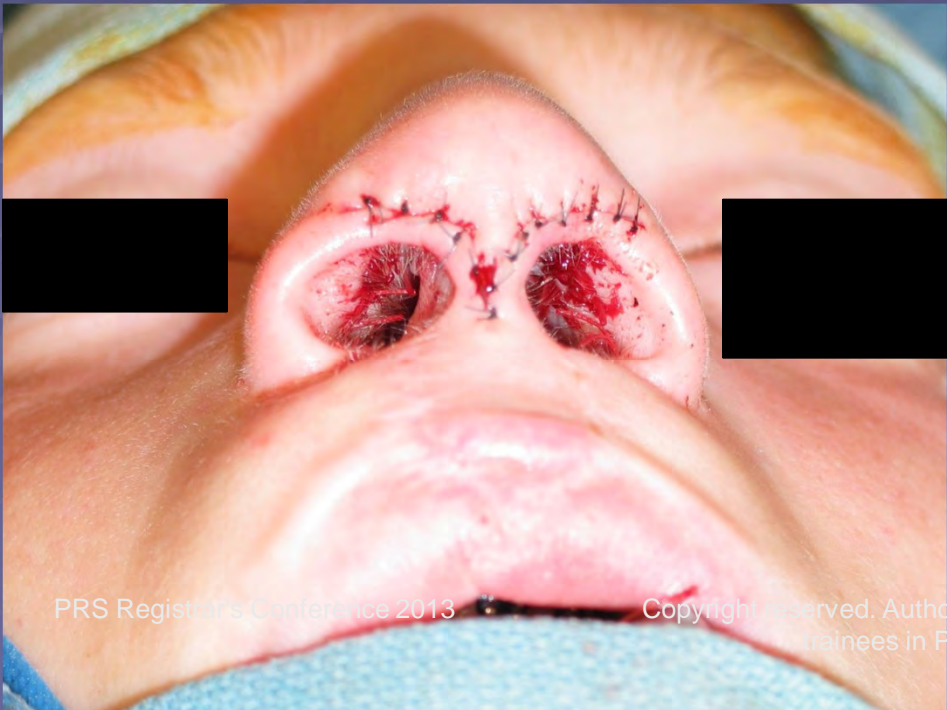
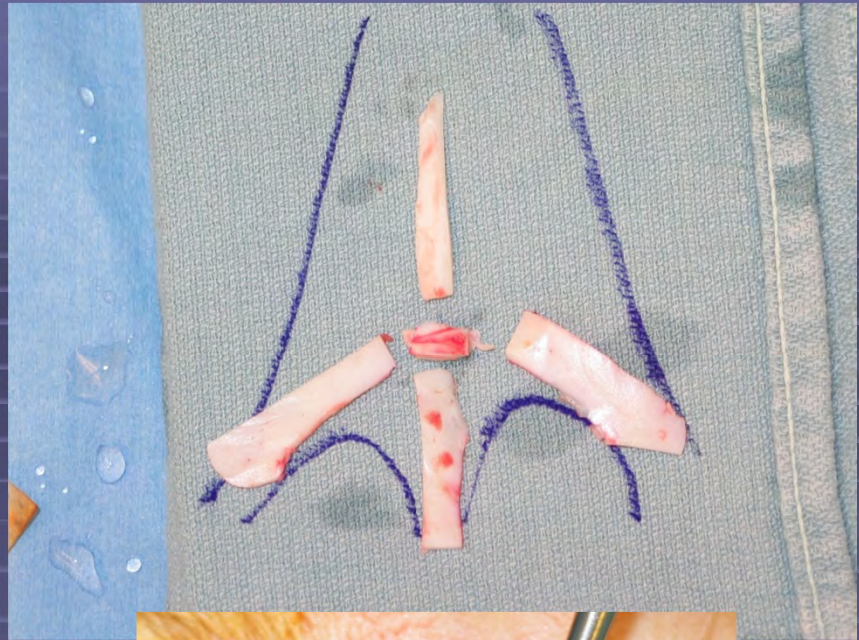
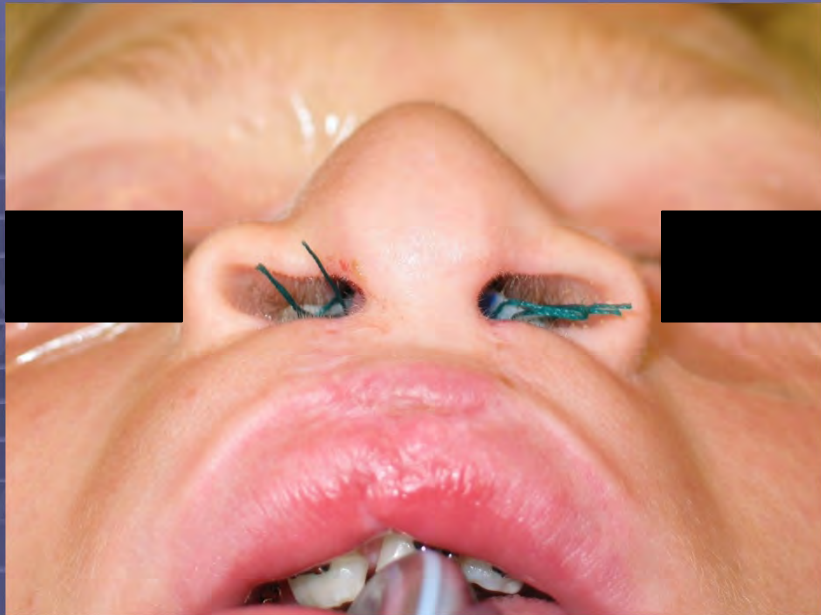
Bilateral Cleft Nose

- Internal support with EXPANSILE framework essential
 - Mild to moderate
 - Septal cartilage
 - Severe
 - rib cartilage

















5 y/o boy s/p primary cleft lip repair at 3 months of age

Pre-Operative



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Intra-Operative
Incision: Transcolumellar, V-Y
advancement



Findings: Collapsed LLC, No
Septal Support

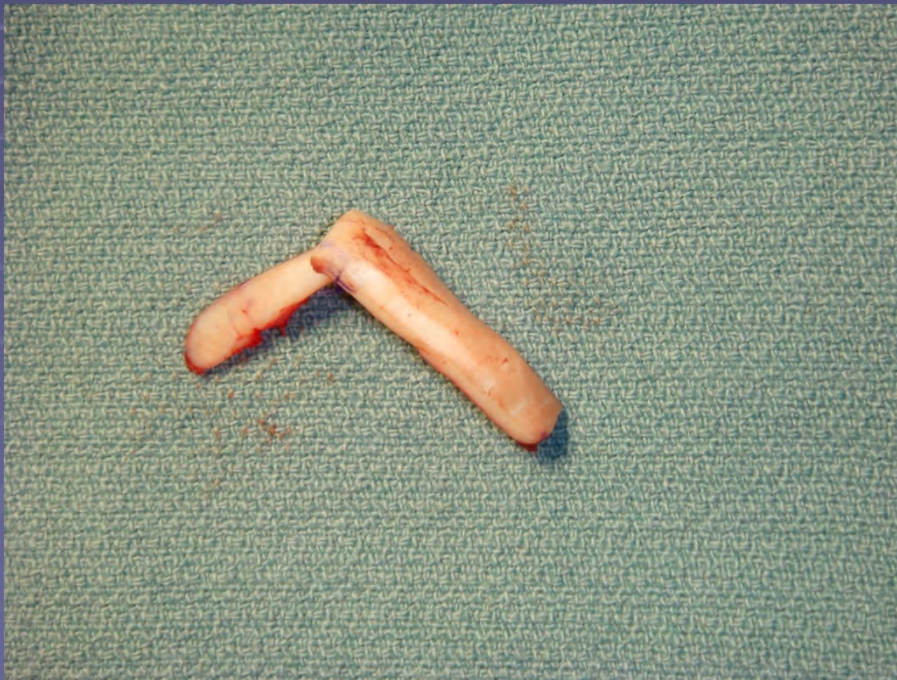
Intra-Operative

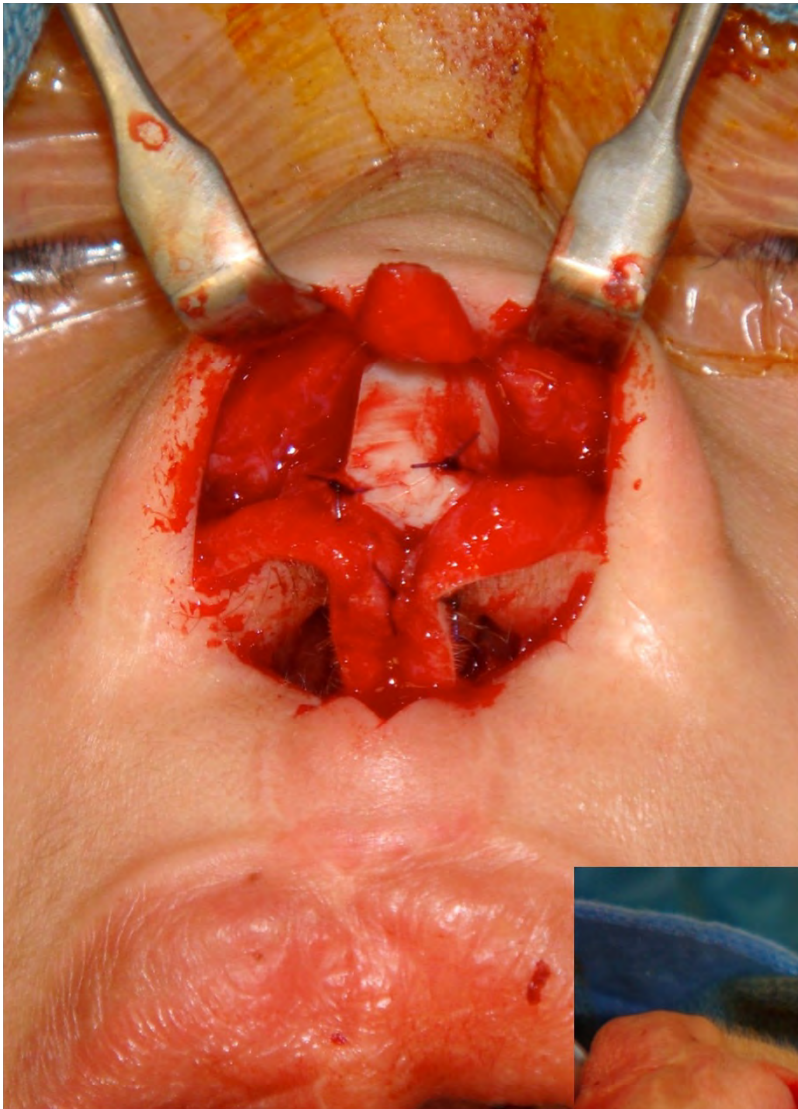


Cartilage Rib Graft

Intra-Operative

Tomahawk Graft





Graft In-Vivo

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Tip Graft



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Post-Operative

