

Nasal Reconstruction

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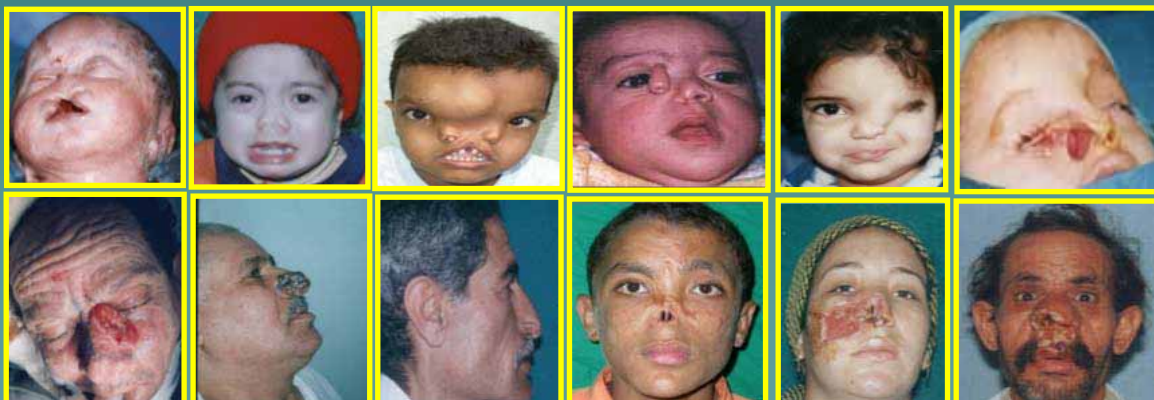
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Nasal Reconstruction

Causes of nasal defect :-

- 1 - Congenital
- 2 - Trauma
- 3 - Tumours
- 4 - Inflammatory



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- ◆ **Nose is a central and prominent feature of the face and commands attention.**
- ◆ **External nasal defect a result of trauma, infection or tumor is a serious problem since ancient time.**
- ◆ **Disfigured nose causes serious effects on persons work and social life.**
- ◆ **So reconstruction of mutilated noses is very much necessary.**

Nasal Reconstruction

- ◆ **Nasal reconstruction is an ancient art.**
- ◆ **Surgeons for many centuries have used their imaginations and skills in trying to reproduce this unique organ so important to facial esthetics.**
- ◆ **The art of reconstructive rhinoplasty born in India apparently 3000 B. C.**
- ◆ **Koomas caste of potters were using and developing this art of reconstructing nose by using Median forehead flap.**
- ◆ **Since then Lucas, Lisfranc, Diffenbach, Labat , Ombradanne and Gillies all have used Indian method of rhinoplasty and done many modifications**
- ◆ **Other alternative flaps were also developed.**

Nasal reconstruction

- ◆ **Treatment options :-**
 - Primary closure
 - Healing by secondary intention
 - Local flap
- ◆ **Defect involving the internal lining must be meticulously repaired.**
- ◆ **Both surgeon and patient should maintain realistic expectations**

Nasal reconstruction

- ◆ **Reconstructive techniques aim to:-**
 - 1- Minimize cosmetic deformity
 - 2- Restore the 3D of the nose and its subunits
 - 3- Maintain structural strength of the nose
 - 4- Maintain airway patency

Nasal Reconstruction

- ◆ The study was carried out in the Department of ORL Mansoura, Egypt between July 1998 to April 2006 for various types of nasal defects reconstruction done in our departments.
- ◆ 41 cases have been operated in our department during this period.
- ◆ Majority of cases were operated in General Anaesthesia.

Nasal Reconstruction

- ◆ In our study, reconstruction of nasal deformities was done by forehead flap (midline, paramedian, islanded or off midline) in 18 (40.19%) cases, scalping flap in 5 (11.36%) cases, Axial frontonasal flap in 2 (4.5%) cases, Nasolabial flap in 4(9%) and Farina flap 4(9%) cases .
- ◆ In congenital cases 8 (11.3%) were operated of which 2 (25%) cases were Tessier clefts no. 3.

Converse, 1959

Nasal reconstruction

- ◆ We have prefabricated forehead flaps and scalping flap whenever local lining flaps were deficient.
- ◆ Skeletal support in the form of iliac bone Cantilever bone graft and /or cartilage graft.

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- ◆ In congenital cases 8 (11.3%).



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- ◆ In 6 (13.65%) cases there was subtotal loss of nose associated with loss of cheek .



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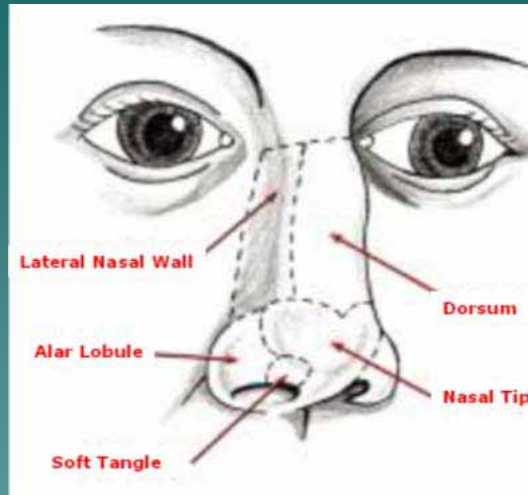
Nasal Reconstruction

- ◆ The clinical grading of our results have been:-
 - 31 (79%) cases out of 41 cases shown good results.
 - 8 (18 %) cases shown fair results
 - 2 (3%) cases poor results.

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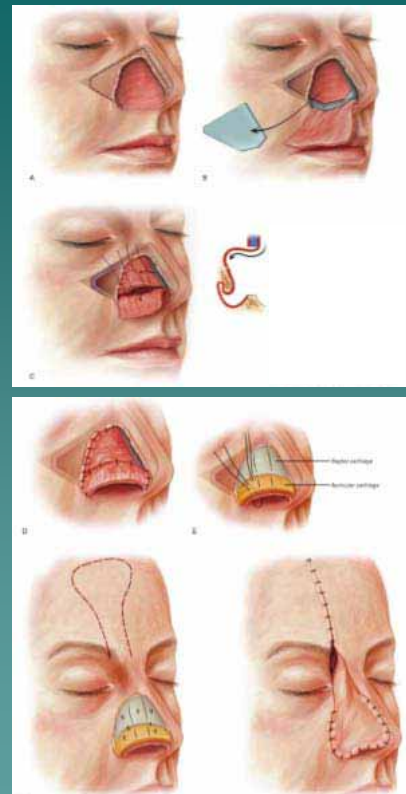
Subunits of the Nose

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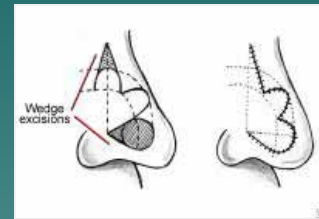
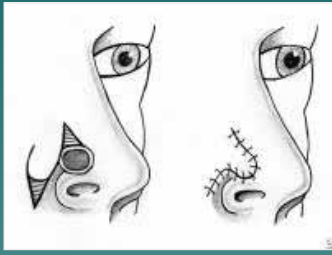
We agree with Park (200) and Menick (2002) that full - thickness defects should be reconstructed in layers: internal lining, support, and external lining, and we applied this point for our patients .



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Nasal Reconstruction Proboscis Lateralis (Congenital tubular nose)

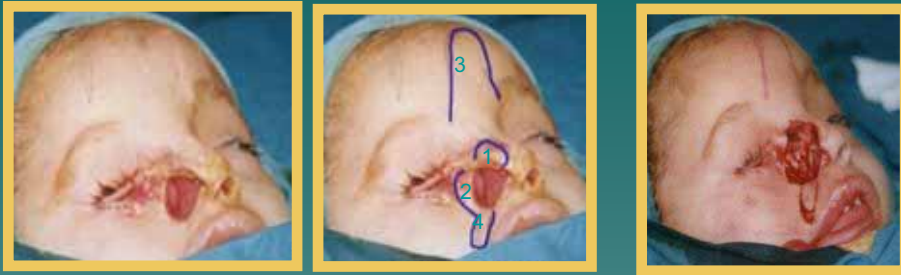
- ❑ Proboscis lateralis (congenital tubular nose)
- ❑ Extremely rare anomaly in which the external nose fails to develop on one side and is replaced by a tubular structure arising at the medial canthus of the eye.



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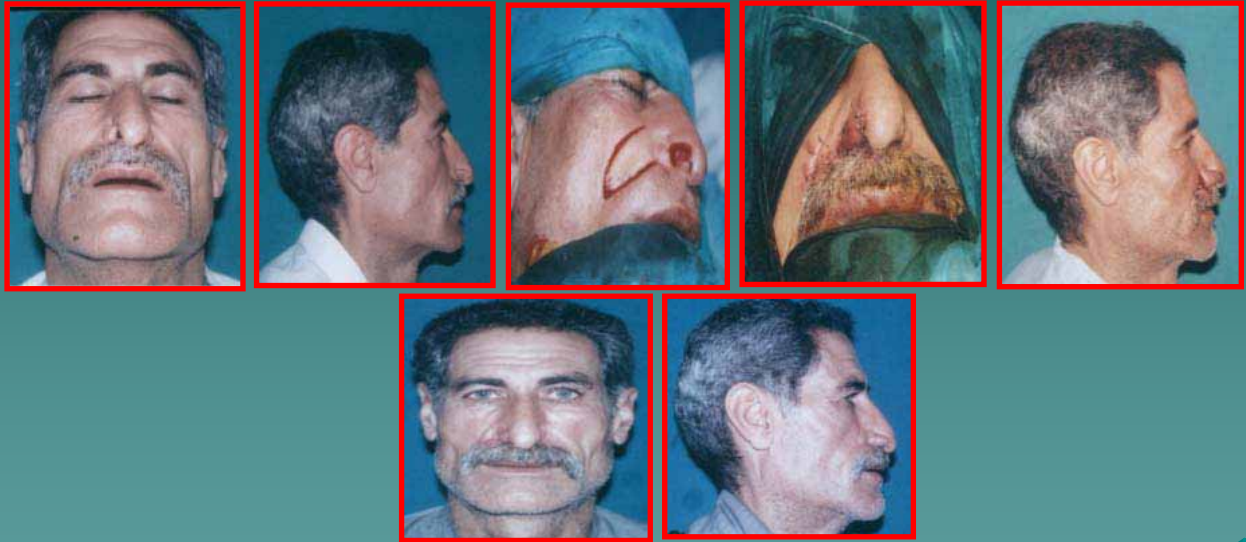
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Nasal Reconstruction

- ◆ **The clinical grading of our results have been:-**
 - **31 (79%) cases out of 41 cases shown good results.**
 - **8 (18 %) cases shown fair results**
 - **2 (3%) cases poor results.**

Nasal Reconstruction

- ◆ **Reconstruction of subtotal and total nose is a challenge to obtain good results.**
- ◆ **The appropriate selection of patients and use of appropriate method of reconstruction gives better results.**
- ◆ **Each case must be individualized to give better results.**
- ◆ **In this study after follow up of 41 patients post operatively, we found that results are better with forehead and scalping flap because of good vascularity of flap and colour, texture of it matches with facial skin**

Nasal Reconstruction

- ◆ According to defect size and position, forehead flap should be designed .
- ◆ Care of pedicle at the base of the flap should be taken during elevation of the flap.
- ◆ we have stressed during nasal reconstruction functional aspect of nose and also aesthetic aspect .

Nasal Reconstruction

- ◆ We conclude that the use of Forehead flaps and scalping flap are the flaps of choice in subtotal and total nasal reconstruction respectively.
- ◆ In reality, recreating the nose is impossible (Menick 2005)
- ◆ The forehead flap remains the workhorse for significant nasal defects.

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Thank You



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