Repair of Nasal Deformity Secondary to Congenital Syphilis Through a Coronal Incision

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INTRODUCTION

Objective: To describe a novel approach for repair of nasal deformity secondary to congenital syphilis through a coronal incision.

Challenges
- Underlying defect in the saddle nose is decreased nasal support resulting in collapse of the nasal dorsum.
- Saddle nose deformity poses various functional and aesthetic challenges, including:
  - flat nasal bridge
  - flattened dorsum
  - lack of support

RESULTS

Methods:
- Literature review and description of a novel repair of saddle nose deformity in a 39-year-old male with congenital syphilis and complete agenesis of the nasal bones.

Our Patient
- At 3 years old, the patient had history of recurrent nasal infections shortly after birth, after which he was diagnosed with and treated for congenital syphilis.
- Reported significant nasal obstruction.
- Exam revealed near complete loss of nasal bones, a flat dorsum, lack of septal support, and septal perforation.

RESULTS
- Calvarial bone graft was harvested from the left parietal region (see Figure 4).
- Graft was then fashioned into a ‘V’ shape that could rest on the maxillary bone and mimic the native nasal bones.
- Graft was secured with titanium microplates and screws (see Figure 5).
- Prior to constructing the calvarial bone graft, the soft tissue envelope overlying the nasal dorsum was elevated.
- The graft was inserted into position through the superior approach.
- The graft was affixed with additional 4-hole 1.2 mm bone screws to the frontal bones (see Figure 6).
- Patience had significant restoration of his nasal dorsum and greatly improved appearance. (See Figures 2 and 3).
- The ‘tenting’ effect provided by the calvarial bones resulted in significant improvement in his nasal airway.
- The degree of dorsal projection was somewhat limited by the amount of soft tissue available, but a highly satisfactory result was achieved.

DISCUSSION

Rhinoplasty
- Although it provides optimal exposure and facilitates precise technique, open rhinoplasty may require more extensive dissection and hence longer intraoperative time.
- Lead to more scar tissue contraction and cause transcutaneous scarring other complications.

CONCLUSIONS

Our Approach
- Given its minimal invasive technique, benefits may include:
  - Less handling of soft tissues
  - Lower risk of post-operative complications such as infection and bleeding
  - More rapid healing and recovery

REFERENCES


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