

BIRTH INJURY RELATED UNILATERAL ANTERIOR NARES PARTIAL FIBROUS ATRESIA: A RARE CASE REPORT

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ABSTRACT

Congenital atresia of anterior nares has been rarely reported and it may co-exist along with posterior choanal atresia.^(1,2) In our case, birth injury caused by forceps delivery has caused unilateral anterior nares partial atresia. Twenty eight years old male patient came with the complaints of left nostril blocked sensation since birth, aggravated with attacks of upper respiratory tract infections. On examination he had left anterior nares partial atresia caused by fibrous bands as a result of birth injury due to instrumental delivery. Rhinoplasty performed to open-up left nostril and patient relieved of his symptoms and also on cosmetic appearance.

KEYWORDS

Nasal obstruction, Anterior nares atresia, Nasal atresia, Choanal atresia, Birth injury, Congenital nostril atresia.

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INTRODUCTION: Nasal septal deformities are more commonly reported following birth injury happening during the second stage of labour. In our case an instrumental forceps delivery has caused injury to the nose, resulting in fibrous bands due to healing that has caused left nostril partial fibrous atresia. This case is reported here for its rarity. There is no report of a similar birth injury causing unilateral partial nares atresia in the literature so far.

CASE PRESENTATION: A twenty eight year male patient, carpenter by profession presented to our ENT-OPD at Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry, with the complaints of left sided nose obstruction since birth, increasing in severity during episodes of upper respiratory tract infection. His mother gave history of birth injury to his nose caused by forceps assisted delivery when he was born. Following the nose injury the patient slowly developed fibrous bands due to healing that caused partial obstruction of his left nostril as days progressed. Thereon he developed left nostril obstruction worsening with nasal allergies and infections.⁽³⁾ Patient also complained of occasional headaches.

On examination the patient had a longitudinal fibrous band extending from mid-dorsum of nose deviating to left sided vestibule and left side of nasal septum. Left anterior nares was laterally collapsed leaving only 2-3mm orifice at its maximum width. Patient also had mild depressive features due to poor cosmetic appearance as a result of the above condition. Cold spatula test revealed very minimal

fogging on left side compared to right nostril, giving a clue that he has not got any posterior choanal atresia association. Nasal endoscopy was not possible even with paediatric nasal rigid endoscopes due to narrow left nasal orifice and hypertrophied ipsilateral turbinate.

Management: Patient and patient attendee was counselled about surgical procedure that may be needed and also the possible need of second stage surgery in the post-op period for cosmetic betterment along with plastic surgeon. Preoperatively CT-scan of paranasal sinuses was done to study,

- Any other altered nasal anatomy,
- Paranasal sinus profiles,
- Osteomeatal complex anatomy and
- To rule out any associated partial or complete choanal atresia if any.⁽⁴⁾

After consent from the patient, left nostril- closed rhinoplasty was done under Local Anaesthesia.

Through endonasal approach fibrous bands were released circumferentially taking care not to involve or injure any of the nasal cartilages so as to avoid cartilage necrosis.⁽⁵⁾ After band release, rigid 4mm Storz Hopkins nasal endoscope was used to visualize the left nasal cavity and osteomeatal complex. Left turbinate was found to be hypertrophied reducing air entry on the side. Hence left sided inferior turbinoplasty was done by Submucosal diathermy technique.⁽⁶⁾

Post-operatively left nasal cavity was packed anteriorly with medicated vented merocel 4 cm nasal pack for 24 hrs period. After 24 hours the left nasal pack was removed and a sterile lubricated vent tube of 10mm diameter was inserted and kept in situ in left nostril for five days and removed and nasal patency and healing observed. Again another similar

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vent tube was placed for five more days as healing may restenose the opened up left nostril. On tenth post-operative day the vent tube was removed and left nostril was found to be patent and healing well.

Patient was symptomatically feeling lot better after the surgery and psychologically uplifted due to better cosmetic result. Patient was advised a second stage surgery few months later along with plastic surgeon's help for scar excision over nasal dorsum and pedicle flap surgery.

CONCLUSION: Birth injury to head and neck is a rare entity these days with improving census of institutional deliveries.⁽⁷⁾ Instrumental deliveries causing permanent physical and cosmetic damage to nose is very rare and not available in literature, probably due to un-reporting by doctors. This case was reported for its rarity and also to stress the fact that a comprehensive clinical and radiological screening should be done for associated anomalies and injuries before treating such patients.



Pre-operative picture



Post-operative picture: POD: 45

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