ORAL PRESENTATION

Abstract O1

Congenital Nasal Pyriform Aperture Stenosis: An Unusual Cause of Respiratory Distress in Neonates

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Congenital nasal pyriform aperture stenosis (CNPAS) is a rare cause of nasal airway obstruction in neonates. Early management is crucial in view of the fact that neonates are obligate nasal breathers for the first few months of life. CNPAS can be diagnosed clinically and confirmed with a computed tomographic (CT) scan. This study reviewed the presentation and management of the CNPAS in a single tertiary pediatric otorhinolaryngology centre. We reported a case series with three-term neonates who presented with respiratory distress and noisy breathing at birth. All of them required intubation and were unable to introduce suction size 6Fr via the nostrils during resuscitation. Two of them were referred straight away after intubation, and one was referred following a failed extubation attempt on Day 7 of life. CT scans have confirmed the narrowing of the nasal pyriform aperture with a solitary maxillary central incisor (megaincisor). Conservative management, including the use of nasal decongestants and humidification, was tried but failed. Therefore, we decided to proceed with surgical intervention. The sublabial approach was used for surgical reconstruction in all patients. The pyriform aperture is enlarged with a bone drill with the placement of a nasopharyngeal airway (NPA) into both nostrils, which acts as a stent. The stent is left in place for a total of two to three weeks for all three patients to ensure the patency of the surgical area. The duration of the stent is very important. One of the neonates had a nasal stent placed for a week, but after a few days, she became desaturated requiring reinsertion of NPA and being kept for an additional two weeks. All of the patients were able to get off their ventilators following surgery and discharge home without oxygen support.

Keywords: CNPAS, megaincisor, sublabial approach, stent

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DOI: http://dx.doi.org/10.31344/ijhhs.v7i20.673

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