Methods

A male premature neonate of 1.6 kg birth weight developed severe respiratory distress and cyanosis immediately after birth. He was intubated and transferred to the Neonatal Intensive Care Unit (NICU). ENT examination confirmed the initial suspicion of bilateral choanal atresia. The extent and nature of the condition was evaluated with Computed Tomography. The rest of the pediatric examination was unremarkable.

The patient initially underwent unilateral surgical repair of the right membranous and bony atresia. Combined transoral-transnasal technique was performed under general anaesthesia. A rigid endoscope \(0^\circ\) was introduced in the nostril to visualize the atretic plate. An opening was created and widened by metallic dilators, using the 120° endoscope transorally, to visualize the nasopharyngeal side of the atretic plate. An appropriate stent was sutured in the nostril for 4 weeks in order to avoid restenosis. The patient was successfully extubated, and remained in the NICU. After 3 weeks a second operation was performed on the contralateral choanae. Nasal breathing of the patient was monitored over a 3-month period. The neonate was on breast feeding at the time of discharge with no respiratory difficulty. The patient is under follow up.

Conclusion:

Congenital choanal atresia is a well-recognized condition characterized by the anatomical closure of the posterior choanae in the nasal cavity. Bilateral choanal atresia is not common, however in case of respiratory distress, physicians should be highly suspicious of this rare condition. Treatment of choice is surgical intervention.