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Case Report

Unilateral Choanal Atresia in a 62 Years Old Patient -

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ABSTRACT

Choanal atresia is the most common congenital nasal abnormality, seen one in every 5-7 thousand live births. Bilateral choanal atresia causes severe respiratory distress in the newborn and requires urgent treatment. When unilateral, nasal obstruction is the main complaint and the diagnosis may be delayed. In this study a 62-year-old patient with unilateral choanal atresia who is admitted to different hospitals with nasal obstruction and remained undiagnosed is presented emphasizing the importance of nasal endoscopic examination in the diagnosis of specific rhinological diseases.

Keywords: Nasal obstruction; Choanal atresia; Adult; Nasal endoscopy

INTRODUCTION

Nasal obstruction is one of the most common reasons for applying to ENT clinics. Determining the cause of this symptom may not be always as it is the most common symptom of many diseases affecting the nasal cavity, paranasal sinuses, and nasopharynx [1].

Choanal Atresia (CA) is a one or twosided closed posterior coana, which provides the gap between the posterior part of the nasal cavity and the nasopharynx. CA, which was first described by Roederer in 1755, occurs once in 5000-7000 live births. Generally, 60-70% of cases are detected unilaterally and in the right nasal cavity, however this appears in women twice more than men. 70% of atresia is of osseous type and 30% of osseomembranous type. In approximately 50% of cases, other congenital anomalies are encountered together. When the case is bilateral, early diagnosis is very important since it is symptomatic with severe respiratory distress early in life. In such cases the babies may die if the diagnosis happens in a timely manner and emergency action isn't taken. However, unilateral choanal atresia may not be detected until adulthood unless a nasal endoscopic examination is performed [2-4].

CASE

A sixty-two-year-old woman was admitted to Lokman Hekim Akay Hospital with a complaint of nasal congestion that did not pass to the ENT clinic. It was learned from her history that different hospitals had applied her to ENT Clinics with the same complaint before, receiving different medical treatments but did not heal over and operation was recommended by many physicians for the diagnosis of left nasal septum deviation and inferior turbinate hypertrophy.

In an ENT examination, anterior rhinoscopy; abundant mucoid secretion in the right nasal cavity, septum deviation and lower turbinate hypertrophy in the left nasal cavity were detected. On nasal endoscopic examination, there was CA on the right (Figure 1). With paranasal sinus Computed Tomography (CT), osseomembranous type unilateral CA was diagnosed (Figure 2,3). No additional pathology accompanying CA was detected in the systematic examination of the patient. The patient was informed about her illness and surgery, and the operation was recommended under elective conditions, but the patient did not accept the operation for some personal reasons.

DISCUSSION

Anterior rhinoscopy, which is the first method of examination for nasal congestion, which is one of the most common reasons for ENT polyclinics, is often insufficient to evaluate the posterior part of the nasal cavity [1].

Coanal atresia is the most common congenital nasal anomaly. Although many embryogenic theories have been suggested in



Figure 1: Nasal endoscopy image.



Figure 2: Axial CT image.

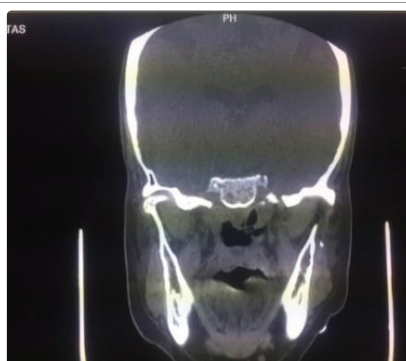


Figure 3: Coronal CT image.

the etiology of CA, the most accepted is that the persistence of the nasobuccal membrane causes this anomaly. When atresia is bilateral, it can cause death due to respiratory distress if the airway is not open, as it causes complete nasal obstruction in the newborn.



Unilateral CA rarely causes respiratory distress. Therefore, it may not be possible to diagnose such a case in newborn and childhood. It is manifested by respiratory distress and cyanosis attacks, which are frequently increased in infants and children. These attacks increase with sleep, suction and decrease with crying. With the learning of mouth breathing, complaints decrease. It can be manifested by the symptoms of breathing difficulties, frequent pharyngitis, absence of taste and smell, speech defects, poor nutrition, unilateral persistent mucoid nasal discharge or sinusitis, which are often accompanied by difficulty at older ages. The most common congenital anomaly that can be seen is Charge Syndrome. (C: Coloboma, H: Heart disease, A: Coanal Atresia, R: Growth-developmental retardation, G: Genital hypoplasia, E: Ear anomalies). Diagnosis of patients whose clinical findings are suspected; With inability to advance the 6 or 8 fr plastic catheters from the anterior nares to the pharynx, diagnostic endoscopic examination and computed tomography taken in the axial plan and nowadays transnasal and transpalatal surgical techniques have been preferred [5-11].

In the differential diagnosis of unilateral nasal congestion in adult ages, foreign body, acute sinusitis, anthrocoanal polyp, tumors as well as choanal atresia must be considered [12]. In our literature search, we found that the oldest age reported in unilateral choanal atresia was 48 years old.

CONCLUSION

Endoscopic examination, which has a very important role in the diagnosis of rhinological diseases, has become routine today. In particular, it is very useful in detecting posterior pathologies. The fact that the diagnosis of congenital choanal atresia has not been established in a 62-year-old patient who has been examined many times with the same complaint indicates how valuable an endoscopic examination is and it should be used in routine examinations.

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