CASE REPORT

UNILATERAL PNEUMATIZATION OF INFERIOR TURBINATE: A CASE REPORT

Nilanjan Datta¹

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ABSTRACT: Pneumatization of inferior turbinate is extremely rare entity. I reported a young aged female patient presented with nasal obstruction and headache. **CASE REPORT:** A 22 years old female patient, presented with complaints of bilateral nasal obstruction and headache since 1 year and aggravated for past 2 months. On anterior rhinoscopy examination bilateral enlarged turbinates were found, where the left turbinate is more hypertrophied. A CT Scan was performed where pneumatisation of left inferior turbinate was found. Excision of both turbinates was done after giving 1 week of systemic antibiotics and nasal decongestants. Nasal Pack removed after 48 hours. Patient was followed up on 7th, 14th and 30th post-op day. From 14th post-opday onwards patient was symptomatically relieved. **DISCUSSION:** Middle turbinate even though one of the common area for conchabullosa but it is also found in inferior turbinate.

KEYWORDS: Conchabullosa, Inferior turbinate, Nasal obstruction.

INTRODUCTION: The inferior turbinate is the least likely to present with pneumatization.¹ I describe a case of inferior turbinate conchabullosa.

CASE REPORT: A 22 year old female patient, presented with complaints of bilateral nasal obstruction and headache since past 1 year which aggravates for past 2 months. Anterior rhinoscopy examination Revealed bilateral enlarged inferior turbinates where right side turbinate is more enlarged.

Para nasal sinuses were non-tender. On rigid endoscopic examination, nasal septum was found straight and both the inferior turbinates found enlarged all along its length. No mucopus or post nasal drip was found. CT Para nasal sinus on axial section revealed bilateral hypertrophy of inferior turbinates with pneumatisation of left inferior turbinate. Initially the patient was given systemic antibiotics and decongestant nasal drops for 1 week but her symptoms was not getting reveled specially on left side.

The patient underwent bilateral inferior turbinectomy under general anesthesia and anterior nasal packing done. Nasal Pack removed after 48 hours. Patient was followed up on 7th, 14th and 30th post op day. From 14th post op day onwards patient was symptomatically relieved.

DISCUSSION: Normal turbinates are thin, curved, shell-like bones covered by ciliated respiratory mucosa.² Hypertrophy of the inferior turbinates is responsible for nasal obstruction more frequently than it is commonly thought. Concha bullosa of inferior turbinate is an extremely rare anatomic malformation.³ Only 11 cases was reported by A Faruk Kdoglu MD, et al in their study.³ Only 2 cases has been reported by Cankaya H, Egeli E, Kutluhan A, Kiris M in their case report.⁴ In a study by B.T. Yang et al they found among 18 patients Fourteen patients had unilateral and two patients had bilateral pneumatization (n=18).

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Seven (39%) of the18 Pneumatised inferior turbinate were bulbous, nine (50%) were lamellar, and two (11%) were of the extensive type. In eight (44%) cases there was communication between the medial wall of the maxillary sinus and the Pneumatised inferior turbinate.⁵ In another study by Ömer Aydına et al they had described only 2 cases of inferior turbinate pneumatisation, among which one was unilateral and another was bilateral.⁶

Although Inferior concha bullosa is generally asymptomatic, nasal obstruction, headache, and epiphora are some of the possible symptoms Isolated. In other studies by Lokman Uzun et al.⁷ and Cankaya H et al.⁴ had found pneumatization of inferior turbinate may be responsible for peisistent nasal obstruction. Although inferior turbinate concha bullosa is generally diagnosed incidentally by computed tomography.³ features of Pneumatized inferior turbinate can be readily identified on CT.

CT-imaging helps clinicians to differentiate other causes of the inferior turbinate hypertrophy. Turbinates can be surgically corrected or partially resected to improve symptoms.

CONCLUSION: Conchabullosa of inferior turbinate is a rare entity which only can be determined by CT scan. Along with surgical correction and partial resection of inferior turbinates, conventional inferior turbinectomy also can be done to get satisfactory results.



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	NAME ADDRESS EMAIL ID OF THE
	CORRESPONDING AUTHOR:
AUTHORS:	Nilanjan Datta,
1. Nilanjan Datta	Flat No. 2A, Ashirvad Apartments,
,	Khudiram Sharani,
PARTICULARS OF CONTRIBUTORS:	Coochbehar-736101,
1. MS, Department of Otorhinolaryngology.	West Bengal, India.
	E-mail: nil148.g@gmail.com
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