

The Incidence of Concha Bullosa and Its Association with Chronic Rhinosinusitis Deviated Nasal Septum and Osteomeatal Complex Obstruction

Fatma Homoud Al Anazy, MD*

Objective: To determine the incidence of concha bullosa and its association with deviated nasal septum, obstruction of osteomeatal complex and chronic rhinosinusitis.

Design: Retrospective study.

Setting: Otorhinolaryngology, head and neck surgery department.

Method: Nine hundred thirty-one consecutive paranasal sinus CTs taken between 2008 and 2010 were reviewed; 347 cases of concha bullosa (CB) were identified. Those cases were reviewed radiologically for the presence and severity of deviated nasal septum, obstruction of the osteomeatal complex and sinus disease. The significance of associations was tested using chi-square or Fischer exact tests.

Result: Patient's age ranged from 8 to 84 years with a mean age of 32.6 years. Two hundred twenty-nine (66%) were females. Three hundred forty-seven (37.3%) had CB and 224 (64.6%) had deviated nasal septum with CB. No association between a unilateral or dominant CB and ipsilateral or contralateral DNS and ipsilateral or contralateral maxillary, ethmoid and sphenoid sinus involvement was found. Similarly, there was no association with disease in the ipsilateral or contralateral osteomeatal complex.

Conclusion: Although concha bullosa is a common occurrence in the nasal cavity, no statistically significant relationships between the presence of concha bullosa, deviated nasal septum, obstruction of osteomeatal complex and sinus disease was found.

Bahrain Med Bull 2011; 33(4):