A 52-year-old woman was admitted to our clinic with posterior nasal drip and nasal obstruction symptoms for several months. On nasal examination, we noted the hypertrophic right middle turbinate and left septal deviation.

**Imaging Findings:**

A 52-year-old woman was admitted to our clinic with posterior nasal drip and nasal obstruction symptoms for several months. On nasal examination, we noted the hypertrophic right middle turbinate and left septal deviation. Computed tomography (CT) of the paranasal sinuses showed a massive concha bullosa. In addition, right maxillary sinusitis was observed. On the endoscopic examination, the concha bullosa was pale. Histopathological examination of the excised lesion from the concha bullosa revealed bacterial colonies in the mucus plug and lymphocytic infiltration, which were both consistent with chronic inflammation. The patient’s symptoms quickly diminished postoperatively.

**Discussion:**

Concha bullosa (CB) is a common anatomic variant in which there is pneumatisation of the nasal turbinates. In the majority of the cases it occurs in the middle turbinate and is frequently bilateral. The prevalence of the CB in the literature varies from 14-53%, whereas it is more frequent in symptomatic patients with sinus disease. Presence of bilateral conchae bullosa ranges from 45%-61.5%. The CB can originate from the extension within the middle turbinate of the frontal recess, the anterior ethmoids or the middle meatus.

Although CB is a common finding even in healthy asymptomatic persons, the possibility of a predisposing factor of obstruction of the ostiomeatal unit and sinusitis has been under investigation, especially when it assumes certain dimensions. They are associated with deviation of the nasal septum away from the concha bullosa and may become infected. However, polyps, mucocele formation, and infection in the concha bullosa are rare.

According to Bolger et al., there are three groups of CB depending on the location of the pneumatisation: the lamellar, the bulbous and the extensive variant. In the lamella, the pneumatisation involves the vertical lamellar part of the concha, in the bulbous type the bulbous segment, whereas the extensive refers to the combination of the previous two variants. There are conflicting data in the literature whether CB could be the cause of sinusitis by narrowing or obstructing the infundibulum and the middle meatus.

On the other hand, several studies seem to demonstrate a significantly high incidence of CB, in patients with sinus disease. This is observed especially in bulbous type CB.

CT scans have a great role in the differential diagnosis, outlining the eventual bony erosion or the intracranial
involvement. In this case MRI should be obtained to show the extension of the lesion. The indicated treatment procedure of CB is the endonasal microsurgery with highly satisfactory results.

**Differential Diagnosis List:** Massive concha bullosa, Mucocele-pyocle, Intranasal tumours, Allergic rhinitis

**Final Diagnosis:** Massive concha bullosa

**References:**


Figure 1

Description: Endoscopic view of the concha bullosa. Origin:
Description: Endoscopic view of the concha bullosa. Origin:
Description: Endoscopic view of the concha bullosa. Origin:
Figure 2 a

**Description:** CT section showing the pneumatisation of the bulbous part of the middle turbinate. Deviation of septum and sinusitis are also observed. **Origin:**
Figure 3

a

**Description:** Right middle turbinate concha bullosa. **Origin:**

b

**Description:** Sinusitis of the right maxillary sinus. **Origin:**