



Letter to the editor of European Archives of Otorhinolaryngology

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Dear Editor,

After reading the article “BMI as a risk factor for the development of chronic rhinosinusitis: a prospective population-based study” by Clarhed et al. recently published in this journal, we concur that it has an advantage over those previously published on the topic in that it is a prospective study and thus the development of chronic rhinosinusitis was studied 5 years after establishing a baseline obesity. Acknowledging this risk factor in a clinical setting could be beneficial in predicting response to treatment.

Numerous therapeutic algorithms have been developed over the years for the adequate treatment of CRwNP (chronic rhinosinusitis with nasal polyposis). Among them are the biologics, which while new in the treatment of nasal polyposis, have been used for the past 18 years in the control of recalcitrant asthma [1]. To date, Dupilumab, Mepolizumab, and Omalizumab are the only FDA and AMM approved biologics for the treatment of CRS with nasal polyposis (CRwNP) [2]. Many studies have reviewed the treatment success of Dupilumab in nasal polyposis, however, none have studied risk factors contributing to treatment failure. We conducted a retrospective study off all patients treated with Dupilumab and Mepolizumab for CRwNP at Larrey Hospital-CHU-Toulouse from 2018 to 2022, and looked at the initial patient characteristics including BMI. Patient response to treatments at 24 weeks were categorized into five groups as per the EUFOREA guidelines; reduced

nasal polyp score, reduced need for systemic corticosteroids, improved quality of life, improved sense of smell and reduced impact of comorbidities. From a total of 31 patients, 50% had a BMI > 25 and 14% of patients had a treatment failure. From this 50%, 14/15(93%) had comorbid asthma, 5/15(33.3%) had associated AERD, 10/15 (66%) had a hyposmia, 9/15 (60%) had moderate to severe nasal obstruction, and 10/15 (66%) had moderate to severe rhinorrhea. Regression analysis was used to analyse if there was a correlation between treatment failure and BMI > 25 (overweight & obese), however, no correlation was found. Patients in the overweight group had an initial symptomatology that was comparable to that of the control group with mean score of SNOT-22 (Sino-nasal outcome test) 48/110 for patients with BMI > 25 and 50/110 for those with a BMI of < 25. Therefore, as proved by the article by Clarhed et al., BMI is associated with the development of CRS, however, it appears that it does not lead to a more severe symptomatology neither does it have a negative impact on the outcome of treatment with Dupilumab and Mepolizumab.

In spite of this, it is with new research studies that we will be able to answer the incognita of the role of obesity in CRSwNP and whether or not its presence may affect treatment efficacy.

References

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