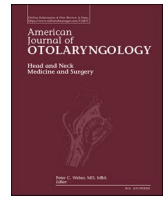


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## Anxiety and depression in patients with nasal septal deviation: What is the clinical impact?

### ARTICLE INFO

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#### Dear Editor,

We read the study by Alessandri-Bonetti et al. entitled “Anxiety and depression mood disorder in patients with nasal septal deviation: a systematic review and meta-analysis [1]”. The authors investigated the association between anxiety, mood disorders, and nasal septal deviation (NSD). According to this meta-analysis including four studies representing 625 patients, the authors concluded that anxiety and depression disorders were more prevalent in patients with NSD. A clear state-of-the-art presentation is drawn by the authors that recalled the studies that tend to prove a consecutive link between NSD and neuropsychological effects. However, this study raised several practical and conceptual questions.

First, the authors underline that NSD affects more than two-thirds of the population. Anxiety and mood disorders are highly prevalent in general population and are a global health burden [2]. Numerous must be the bias related to organic and psychiatric comorbidities [3]. Many limitations exist, as acknowledged by the authors. Many factors could be on the path between NSD and depression and anxiety. Organic and psychiatric comorbidities are insufficiently reported, as anxiety and depression are insufficiently described in subgroups.

Second, the relationship between both NSD, depression and anxiety is still difficult to demonstrate. It can be supposed that patients with NSD may present a particular vulnerability to anxiety and depressive disorders by the daily alteration of their nasal breathing and by the sleep disorders associated with NSD [4]. A link with QoL alteration has already been described [5]. On the other hand, it can be assumed that, in the context of anxiety disorders, patients with NSD may pay more attention to nasal breathing disorders. This attention would then be constitutive in some of their anxiety disorder or an anxious personality trait [6].

Finally, anxiety or depressive disorders are usually a criterion for exclusion from major surgeries [7] or surgeries that modify the body's schema and perception [8]. On the one hand, modifying the perception of nasal ventilation is at risk of deregulating this scheme and aggravating anxiety or depressive disorder [9]. On the other hand, if this

anxiety or depressive disorders were secondary or compounded to the alteration of the QoL due to a disorder of nasal ventilation, it would be a risk to deprive the patients who could benefit the most from corrective surgery.

While this meta-analysis is well-conducted and investigates an interesting association, we note that this study raises many questions that deserve further analysis and discussion because they engage the success of diagnostic and therapeutic approaches in rhinology with millions of patients.

#### Declaration of competing interest

None.

#### Acknowledgments

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#### References

- [1] Alessandri-Bonetti M, Costantino A, Gallo Afflitto G, Carbonaro R, Amendola F, Catapano S, et al. Anxiety and depression mood disorder in patients with nasal septal deviation: a systematic review and meta-analysis. *Am J Otolaryngol* 2022;43:103517.
- [2] Kalin NH. The critical relationship between anxiety and depression. *AJP* 2020;177:365–7.
- [3] Clark DW, Del Signore AG, Raithatha R, Senior BA. Nasal airway obstruction: prevalence and anatomic contributors. *Ear Nose Throat J* 2018;97:173–6.
- [4] Fried J, Yuen E, Li A, Zhang K, Nguyen SA, Gudis DA, et al. Rhinologic disease and its impact on sleep: a systematic review. *Int Forum Allergy Rhinol* 2021;11:1074–86.
- [5] Valsamidis K, Printza A, Titelis K, Constantinidis J, Triaridis S. Olfaction and quality of life in patients with nasal septal deviation treated with septoplasty. *Am J Otolaryngol* 2019;40:747–54.
- [6] Irvine KR, McCarty K, McKenzie KJ, Pollet TV, Cornelissen KK, Tovée MJ, et al. Distorted body image influences body schema in individuals with negative bodily attitudes. *Neuropsychologia* 2019;122:38–50.
- [7] Ghoneim MM, O'Hara MW. Depression and postoperative complications: an overview. *BMC Surg* 2016;16:5.
- [8] Rankin M, Borah GL. Anxiety disorders in plastic surgery. *Plast Reconstr Surg* 1997;100:535–42.

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- [9] Saragusty C, Berant E, Yaniv E. Association of attachment anxiety and satisfaction with nasal surgery. *Rhinology* 2011;49:117–20.

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