## Pulmonary function tests in patients with chronic rhinosinusitis and the effect of surgery Mahmood D. Al-Mendalawi

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I have read with interest the study by Yousof *et al.* [1] on the pulmonary function tests (PFTs) in patients with chronic rhinosinusitis (CRS) and the effect of surgery. Based on spirometry, the authors found that there were significantly lower values of mean forced vital capacity (FVC), FVC%, forced expiratory volume in the first second (FEV<sub>1</sub>), and FEV1% in the group of patients with CRS compared with the control healthy group. In the group of patients undergoing endoscopic sinus surgery for CRS, the mean values of FVC, FVC%, FEV<sub>1</sub>, and FEV<sub>1</sub>% were significantly higher during the postoperative follow-up period than preoperative PFTs [1]. I presume that these findings ought to be interpreted cautiously owing to the presence of the following important methodological limitation. It is noteworthy that the evaluation of PFTs is usually done by examining the absolute values of FEV<sub>1</sub>, FVC, and FEV<sub>1</sub>/FVC, comparing them with predicted values, and examining the shape of the curves. Accurate interpretation of PFTs in particular patients compared with the matched controls requires population-specific reference values (RVs). There are many population-specific RVs of PFTs employed in clinical settings [2,3]. The authors did not mention which RVs they employed in their study. To the best of my knowledge, the only available Egyptian RVs based on age and height were constructed more than two decades ago for FVC, FEV1, and forced expiratory flow 25-75% Correspondence to Mahmood D. Al-Mendalawi, MBBCh, DCH, FICMS, Department of Paediatrics, Al-Kindy College of Medicine, University of Baghdad, PO Box 55302, Baghdad, 1111, Iraq Mob: +9647703462470; Tel: +964015548170; e-mail: mdalmendalawi@vahoo.com

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for healthy nonsmokers female industrial workers [4], and they are no more valid in the clinical field. As normal lung function tends to be genetically, physiologically, nutritionally, environ mentally, psychologically, socioeconomically, and ethnically determined [5], it is of utmost importance to construct new Egyptian population-specific prediction equations to establish RVs of PFTs through consideration of the already mentioned determinants. I presume that the employment of national RVs might alter the study results by Yousof and colleagues.

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## **Conflicts of interest**

There are no conflicts of interest.

## References

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