

Correspondence

Reply

To the Editor:

Drs Rajalingham and Das¹ raise important issues. It is certainly interesting to consider the role that obstructive sleep apnea (OSA) may have in asthma in individuals with morbid obesity. We have recently published that OSA is associated with symptoms of poor asthma control in obesity.² However, we are not aware of literature suggesting that OSA causes airway hyperreactivity, though future studies of the role of OSA in asthma are certainly warranted.

Our study was not actually powered to detect changes in medication. However, a number of retrospective studies have reported that asthma medication usage decreases following bariatric surgery.^{3,4}

We agree that elevated serum IgE level is not a specific finding for allergic asthma. Patients with pulmonary disease other than asthma were excluded from our study. Participants had intensive preoperative and study evaluations prior to being approved as healthy for surgery and then deemed eligible for this study.⁵

Future studies investigating the mechanism of improvement in airway hyperresponsiveness with bariatric surgery are certainly warranted. Given the expense and comorbidities associated with

such surgery, it is unlikely to be an effective intervention for many obese patients with asthma, and other studies of weight loss and novel therapies are needed.

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REFERENCES

1. Rajalingham S, Das S. How obesity and bariatric surgery can affect asthma control. *J Allergy Clin Immunol* 2012;129: XXX-XXX.
2. Dixon AE, Clerisme-Beaty E, Sugar EA, Cohen RI, Lange JE, Brown ED, et al. Effects of obstructive sleep apnea and gastroesophageal reflux disease on asthma control in obesity. *J Asthma* 2011;48:707-13.
3. Sikka N, Wegienka G, Havstad S, Genaw J, Carlin AM, Zoratti E. Respiratory medication prescriptions before and after bariatric surgery. *Ann Allergy Asthma Immunol* 2010;104:326-30.
4. Reddy RC, Baptist AP, Fan Z, Carlin AM, Birkmeyer NJ. The effects of bariatric surgery on asthma severity. *Obes Surg* 2011;21:200-6.
5. Dixon AE, Pratley RE, Forgione PM, Kaminsky DA, Whittaker-Leclair LA, Griffes LA, et al. Effects of obesity and bariatric surgery on airway hyperresponsiveness, asthma control, and inflammation. *J Allergy Clin Immunol* 2011;128:508-15, e2.

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