

REFERENCES

- 1 Berbesu EA, Katzenstein AA, Snow JL, et al. Transbronchial biopsy in usual interstitial pneumonia. *Chest* 2006; 129:1126–1131
- 2 Raghu G, Mageto YN, Lockhart D, et al. The accuracy of the clinical diagnosis of new-onset idiopathic pulmonary fibrosis and other interstitial lung disease: a prospective study. *Chest* 1999; 116:1168–1174
- 3 Hunninghake GW, Zimmerman MB, Schwartz DA, et al. Utility of a lung biopsy for the diagnosis of idiopathic pulmonary fibrosis. *Am J Respir Crit Care Med* 2001; 164:193–196
- 4 Lettieri CJ, Veerappan GR, Helman DL, et al. Outcomes and safety of surgical lung biopsy for interstitial lung disease. *Chest* 2005; 126:1600–1605
- 5 Lettieri CJ, Veerappan GR, Parker JM, et al. Discordance between general and pulmonary pathologists for the diagnosis of interstitial lung disease. *Respir Med* 2005; 99:1425–1430
- 3 Katzenstein A-LA, Zisman DA, Litzky LA, et al. Usual interstitial pneumonia: histologic study of biopsy and explant specimens. *Am J Surg Pathol* 2002; 26:1567–1577
- 4 Utz JP, Ryu JH, Douglas WW, et al. High short-term mortality following lung biopsy for usual interstitial pneumonia. *Eur Respir J* 2001; 17:175–179

Allergic Rhinitis May Be Important in Snoring Infants

To the Editor:

We read with interest the article by Kalra et al,¹ who found that the prevalence of habitual snoring for 1-year-old children was 15% in a high-risk group for atopy, *ie*, children born to atopic parents. This prevalence was significantly higher than that reported in older children, 10.9% in 6- to 12-year-old children in Hong Kong,² and 10 to 14% in < 6-year-olds in Europe and the United States.³ This higher prevalence is most likely due to the fact that 29% of this group of infants were atopic, and it is not surprising that Kalra et al¹ found that the presence of atopy increased the risk of habitual snoring (odds ratio, 2.0; 95% confidence interval, 1.2 to 3.0), a common symptom of obstructive sleep apnea syndrome (OSAS).⁴ This was similar to previous findings in Hong Kong,² when we found allergic rhinitis to be a significant risk factor for witnessed apnea with an adjusted odds ratio of 2.19, another symptom of OSAS as well as in the United States.⁵ It is unfortunate that Kalra et al¹ did not report the prevalence of nasal symptoms in their cohort, as the data would have shed light on the mechanisms that link habitual snoring and atopic status, possibly allergic rhinitis. Other important data that were not reported were the parts played by individual allergens, especially the airborne allergens vs food allergen. These data would help determine whether the inhaled route or the ingested route is important in the habitual snoring infants. In the study of Kalra et al,¹ the definition of positive atopic status for egg white and whole milk was wheal ≥ 3 cm than the negative control, and this would be associated with a high false-positive rate.⁶

Allergic rhinitis leads to markedly increased nasal resistance, and Rappai et al⁷ found that nasal congestion was a strong independent risk factor for snoring and an increased likelihood for moderate or severe sleep-disordered breathing. In conclusion, Kalra et al¹ reported an important study about infantile snoring, but important data were not included that may shed more light on this underrecognized symptom. Nevertheless, all medical practitioners dealing with atopic infants should ask the same question as did Kalra et al,¹ *ie*, how often does your baby snore?

Daniel K. Ng, FRCP
Pok-yu Chow, MRCP
Ka-li Kwok, FRCP
Chung-him Loong, BSc
Hong Kong, SAR, China

Response

To the Editor:

I believe that Drs. Shorr, Lettieri, and Helman misinterpreted the message of our article (May 2006).¹ This work generated a hypothesis that will require further testing. It was not intended to produce a clinical recommendation to use transbronchial lung biopsies (TBBs) to diagnose usual interstitial pneumonia (UIP). In our article, we clearly state that TBBs should be tested in a blinded fashion and in a cohort of diffuse lung diseases including UIP and non-UIP cases.¹ However, it is undeniable, as we show in several of our figures, that features specific for UIP, such as patchwork pattern of interstitial fibrosis, fibroblastic foci, and honeycomb change,^{2,3} are readily recognizable in many TBB specimens.¹ We did not report findings of nonspecific interstitial pneumonia in 9 of 21 patients, as Drs. Shorr, Lettieri, and Helman state. We make clear in the "Materials and Methods" section that findings were "nonspecific" if there was only interstitial fibrosis on TBB specimens.¹ Unfortunately, it has become accepted, despite lack of convincing data, that TBBs are not useful in diagnosing idiopathic interstitial pneumonias. However, if in the future TBBs are found useful in diagnosing UIP from a pool of patients with diverse idiopathic interstitial pneumonias, many unnecessary surgical lung biopsies with associated morbidity and mortality could be prevented.⁴

David A. Zisman, MD
David Geffen School of Medicine at UCLA
Los Angeles, CA

The author has no conflicts of interest to disclose.
Reproduction of this article is prohibited without written permission from the American College of Chest Physicians (www.chestjournal.org/misc/reprints.shtml).

Correspondence to: David A. Zisman, MD, Division of Pulmonary, Critical Care and Hospitalists, David Geffen School of Medicine at UCLA, 37–131 Center for the Health Sciences, Los Angeles, CA 90095; e-mail dzisman@mednet.ucla.edu

DOI: 10.1378/chest.06-2404

REFERENCES

- 1 Berbesu E, Katzenstein AL, Snow J, et al. Transbronchial biopsy in usual interstitial pneumonia. *Chest* 2006; 129:1126–1131
- 2 Katzenstein A-LA, Myers JL. Idiopathic pulmonary fibrosis: clinical relevance of pathologic classification. *Am J Respir Crit Care Med* 1998; 157:1301–1315

The authors have reported to the ACCP that no significant conflicts of interest exist with any companies/organizations whose products or services may be discussed in this article.

Reproduction of this article is prohibited without written permission from the American College of Chest Physicians (www.chestjournal.org/misc/reprints.shtml).

Correspondence to: Chung-him Loong, BSc, Department of Paediatrics, Kwong Wah Hospital, Hong Kong SAR, Kowloon 852, China; e-mail: lch029@ha.org.hk

DOI: 10.1378/chest.06-1354

REFERENCES

- 1 Kalra M, LeMasters G, Bernstein D, et al. Atopy as a risk factor for habitual snoring at age 1 year. *Chest* 2006; 129: 942–946
- 2 Ng DK, Kwok KL, Cheung JM, et al. Prevalence of sleep problems in Hong Kong primary school children: a community-based telephone survey. *Chest* 2005; 128:1315–1323
- 3 Young T, Peppard PE, Gottlieb DJ. Epidemiology of obstructive sleep apnea: a population health perspective. *Am J Respir Crit Care Med* 2002; 162:1217–1239
- 4 Chau KW, Ng DKK, Kwok CKL, et al. Clinical risk factors for obstructive sleep apnea in children. *Singapore Med J* 2003; 44:570–577
- 5 McColley SA, Carroll JL, Curtis S, et al. High prevalence of allergic sensitization in children with habitual snoring and obstructive apnea. *Chest* 1997; 111:170–173
- 6 Sporik R, Hill DJ, Hosking CS. Specificity of allergen skin testing in predicting open food challenges to milk, egg and peanut in children. *Clin Exp Allergy* 2000; 30:1495–1498
- 7 Rappai M, Collop N, Kemp S, et al. The nose and sleep-disordered breathing, what we know and what we do not know. *Chest* 2003; 124:2309–2323

Response

To the Editor:

We thank Ng et al for their interest in our article.¹ They raise concern about lack of data on nasal symptoms and our definition for positive skin-prick test results. Using the rhinitis definition of a positive parent report to the question “In the past 12 months, has your child ever had a problem with sneezing, or a runny, or a blocked nose when he/she did not have a cold or flu?” we found a strong association between rhinitis and habitual snoring ($p < 0.001$) in our cohort of 681 infants. In multivariate logistic regression model with habitual snoring as the dependent variable, the adjusted odds ratio for rhinitis was 2.5 (confidence interval, 1.7 to 4.0) and atopy (defined as positive skin-prick test result to an aeroallergen or food allergen was 1.9 (confidence interval, 1.2 to 2.9). Infants with positive skin-prick test results to aeroallergens compared to infants with negative skin-prick test results to all allergens had a trend for higher prevalence of habitual snoring (20.4% vs 12.9%, $p = 0.05$); and infants with positive skin-prick test results to food allergens compared to

infants with all negative skin-prick test results to all allergens had a significantly higher prevalence of habitual snoring (22.5% vs 12.9%, $p = 0.01$). It is important to mention that at age 1 year, the prevalence of atopy to food allergens was much higher than that to aeroallergens. Therefore, a smaller sample size with lower power for aeroallergens could potentially explain the lack of significance for that group. At age 2 years, we have reported a dramatic increase in aeroallergen atopy.² Given these findings, we propose to study the independent relationship between atopy to aeroallergens and habitual snoring at age 2 years. Our definition of a positive skin-prick test result is the standard proposed by the practice parameter committee of the Academy of Allergy, Asthma, and Immunology.³ Unfortunately, as pointed out by Ng et al, there are some limitations to this criterion. In summary, our data suggest that both rhinitis and atopy are independently associated with increased risk for habitual snoring in infants.

Maninder Kalra, MD, MS

David Bernstein, MD

Jocelyn Biagini, MS

Patrick Ryan, MS

Grace LeMasters, PhD

Cincinnati Children's Hospital Medical Center

Cincinnati, OH

The authors have no conflicts of interest to disclose.

Reproduction of this article is prohibited without written permission from the American College of Chest Physicians (www.chestjournal.org/misc/reprints.shtml).

Correspondence to: Maninder Kalra, MD, MS, Cincinnati Children's Hospital Medical Center, 3333 Burnet Ave, MLC 2021, Cincinnati, OH 45229; e-mail: maninder.kalra@cchmc.org

DOI: 10.1378/chest.06-2387

REFERENCES

- 1 Kalra M, Lemasters G, Bernstein D, et al. Atopy as a risk factor for habitual snoring at age 1 year. *Chest* 2006; 129: 942–946
- 2 LeMasters G, Wilson K, Levin L, et al. High prevalence of aeroallergen sensitization among infants of atopic parents. *J Pediatr* 2006; 149:505–511
- 3 Bernstein IL, Storms WW. Practice parameters for allergy diagnostic testing. Joint Task Force on Practice Parameters for the Diagnosis and Treatment of Asthma. American College of Allergy, Asthma and Immunology. *Ann Allergy Asthma Immunol* 1995; 75:543–625