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Rice Allergy

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bacteremia (6–20 days) despite aggressive and adequate antibiotic therapy. However, in our article, in contrast to the findings of Khashu et al, we reported that most patients had Gram-negative infections, as is the case in most patients with nosocomial infections in our institution. Thus, the “new syndrome” described by Khashu et al and previously reported by us is not exclusively a result of CoNS and is probably due to agents that predominate in a given nursery.

Khashu et al state in their retrospective report that in their patients there was no “obvious endovascular focus.” This statement is limited by the fact that an echocardiogram was performed on only 18 of the 31 infants with persistent bacteremia, and for none was a bone scan performed or reported. Moreover, Khashu et al did not look specifically for subcutaneous abscesses that may be easily overlooked (as pointed out in our article), that were usually not present (or discovered) at the onset of the signs of sepsis, and that were present in 22% of the infants with persistent bacteremia.

We hope these comments will help enhance the importance of the topic of persistent bacteremia in neonates.

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REFERENCES

1. Khashu M, Osioviich H, Henry D, Al Khotani A, Solimano A, Speert DP. Persistent bacteremia and severe thrombocytopenia caused by coagulase-negative *Staphylococcus* in a neonatal intensive care unit. *Pediatrics*. 2006;117:340–348
2. Mandel D, Littner Y, Mimouni FB, Dollberg S. Nosocomial cutaneous abscesses in septic infants. *Arch Dis Child Fetal Neonatal Ed*. 2004;89:F161–F162

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Rice Allergy

To the Editor.—

Rice is very popular all over the world. Many people cook and eat rice, and Japanese sake is also made of rice. Rice is regarded as hypoallergenic, and rice hypersensitivity is not common.^{1,2} However, a case of asthma caused by the inhalation of vapors from boiling rice has been reported.³ We experienced 2 cases of rice allergy possibly induced by the subjects being exposed to rice allergens in their family business.

A 7-year-old girl had been suffering from bronchial asthma since 8 months of age. When she was 4 years old, she visited our hospital because her asthma control was

very poor; she had already been admitted to the hospital 14 times. We prescribed an inhaled corticosteroid, but it did not work. Her serum levels of immunoglobulin E (IgE) at 2 years of age were 38.3 U_A/mL for rice, 1.81 U_A/mL for soybean, 1.32 U_A/mL for wheat, and negative for egg white and cow's milk. Although she was able to consume cooked rice without any symptoms, because she had a high level of serum rice IgE and her family's business is rice milling at her family house, we suggested that her asthma attacks might be induced by rice-powder inhalation. Her family borrowed an apartment near their house, and since then, she has never come close to the rice-milling machines. Thereafter, her asthma attacks appeared only once per several months. Once while making rice cake, she had allergic conjunctivitis, which may have been induced by the rice powder that was added to the rice cakes.

A 3-year-old boy had suffered from atopic dermatitis since 3 months of age. His family's business is sake brewing; the factory is next door to his house. He visited our hospital at 4 months of age. His serum levels of IgE were negative for egg white, cow's milk, wheat, soybean, and rice, but he had eosinophilia (2360/mm³). We gave him dietary advice, but elimination of foods was not strict, and he continued to eat rice. We also prescribed ketotifen and steroid ointments, but his eczema did not improve. At 11 months of age, only rice IgE was positive (2.21 U_A/mL), and at 16 months of age, rice IgE was increased (87.1 U_A/mL) and egg white IgE was weakly positive (0.54 U_A/mL). He started to eat potatoes instead of rice as a staple food. Thereafter, his skin condition began to improve, and 6 months later he was able to begin to eat rice again. However, when he came near rice-threshing or -milling machines, his skin flared up in a rash.

In the second case, eating rice may have induced the rice allergy and worsened his skin condition, but only rice IgE was highly positive, which is very rare in food allergy. Rice allergen must have been spread in the air in the process of making Japanese sake. In both cases, the nature of the family business may have influenced the induction of rice allergy and the occurrence of symptoms. The living environment may be an important factor in the induction of rice allergy.

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REFERENCES

1. Rance F, Kanny G, Dutau G, Moneret-Vautrin DA. Food hypersensitivity in children: clinical aspect and distribution of allergens. *Pediatr Allergy Immunol*. 1999;10:33–38

2. Imai T, Iikura Y. The national survey of immediate type of food allergy [in Japanese]. *Arerugi*. 2003;52:1006–1013
3. Gonzalez-Mendiola R, Martin-Garcia C, Carnes J, Campos J, Fernandez-Caldas E. Asthma induced by the inhalation of vapours during the process of boiling rice. *Allergy*. 2003;58:1202–1203

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Continuous Negative Extrathoracic Pressure (CNEP) in Neonatal Respiratory Failure: Correction

To the Editor.—

There have been many allegations in the British press in the last 6 years that the conduct of the randomized trial of noninvasive respiratory support for preterm infants with respiratory distress that we published in this journal in December 1996^{1,2} was deeply flawed. One independent rebuttal of most of those claims was published in 2000,³ but because the regulatory bodies are still investigating these allegations,⁴ it becomes important to state clearly that the results reported in the original article are correct and require no amendment.

Despite stratified randomization based on gestation and the need for oxygen and other respiratory support at 4 hours, the mean birth weight of infants randomly assigned to receive conventional care turned out to be lower than those offered continuous negative extrathoracic pressure (CNEP) using a Perspex chamber from the neck down. In most trials, random allocation is relied on to provide balanced study groups for comparison, and no retrospective attempt is made to adjust for any residual imbalances uncovered after the trial ends, and that is what was done in this trial.

However, 25 infants weighing <1 kg ended up receiving CNEP, and 40 received standard treatment; 28 of the 122 infants treated with CNEP died, and 22 of the 122 were offered standard care. These differences could have arisen by chance, and we did not think it was appropriate to undertake additional statistical manipulation of the data. Indeed, even if allowance is made for the residual imbalance in the matching variables, gestation, and oxygen need, using conditional logistic regression, the difference in mortality still remains readily explained by the play of chance (odds ratio: 2.56; 95% confidence interval: 0.87–7.51). Adjusting for the imbalance in birth weight also leaves the difference in mortality nonsignificant (odds ratio: 1.99; 95% confidence interval: 0.81–4.89). Adjusting for all the imbalances simultaneously does reveal a treatment difference that just reaches significance at the 5% level, but this inference should be treated with considerable caution because it is based on just 26 of the 122 randomized pairs (those pairs in which 1 infant died and 1 survived). What is more, the decision to perform this analysis was

itself suggested by the data, and it is well known that this generally leads to statistical significance being overestimated. Thus, evidence of a difference in mortality is weak, and we now know that the slight imbalance in disability in the 10-year-old survivors is in the reverse direction.⁵

As the initiating researchers for this study, we thank Professor Doug Altman in Oxford for agreeing to conduct this additional analysis jointly with the trial's original statistician. The original (anonymized) data file is now in the public domain,^{6,7} which allows others to scrutinize these findings for themselves. Publication of this note allows us to correct the 1 error that did creep into the original article: a statement in the discussion indicated that the unexpected imbalance in birth weight (correctly reported in the results section) would tend to diminish the potential implication of the statistically nonsignificant difference in mortality between the 2 treatment groups, when the converse is obviously the case.

Neonatal care has moved on in the 18 years since this trial was first planned. Even surfactant was not generally available in the United Kingdom when the first patients were recruited. The concept that action to sustain alveolar distension by negative extrathoracic pressure might limit the number of infants needing endotracheal intubation and consequential lung trauma was a novelty when the CNEP trial was first launched. It is now increasingly realized that the concept was right but that constant positive airway pressure through the nose (nasal continuous positive airway pressure) addresses the same need in a simpler way in preterm infants. However, there still remains a real possibility that CNEP has a useful role to play in managing older infants with nasal congestion and a viral respiratory tract infection,⁸ and we remain deeply dismayed that the flawed criticism of our earlier article has put an effective embargo on the additional exploration of this possibility in the United Kingdom for more than 6 years.

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REFERENCES

1. Samuels MP, Raine J, Wright T, et al. Continuous negative extrathoracic pressure in neonatal respiratory failure. *Pediatrics*. 1996;98:1154–1160
2. International Register of Controlled Trials. Continuous negative extrathoracic pressure (CNEP) in neonatal respiratory failure: ISRCTN05982584. Available at: www.controlled-trials.com/iscrtn/trial/0/05982584.html. Accessed April 18, 2006
3. Hey E, Chalmers I. Investigating allegations of research misconduct: the vital need for due process. *BMJ*. 2000;321:752–755
4. Dyer C. Appeal court rules that GMC must reconsider complaints against Southall. *BMJ*. 2005;331:1426. Available at:

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