REFERENCES


In Reply.—

Bursch et al are all esteemed colleagues who have made significant contributions to our understanding of child abuse in the medical setting. The purpose of our clinical report and its target audience are reflected in the heading: “Guidance to the clinician in rendering pediatric care.” The report had 2 goals: (1) to remind pediatricians that medical signs and symptoms can be fabricated or inaccurately reported and (2) to encourage pediatricians to accept responsibility for making the diagnosis of child abuse that takes place in a medical setting.

The statement clearly explained that consideration of motivation is important in the overall response to these cases but not in its diagnosis. Although it is true that the motivation of the caretaker is often questioned, it remains most important that whenever a caretaker’s actions harm a child, steps must be taken to protect the child regardless of whether the harm was intended. The pediatrician often lacks enough reliable information to determine the motives behind an injury. The Committee on Child Abuse and Neglect continues to work to remind pediatricians that child abuse in the medical setting is a potentially dangerous condition that, like many others, often cannot be evaluated fully in the office. Thus, we recommend that the medical provider “work with a hospital- or community-based child protection team,” and we discussed (under “Treatment”) the involvement of child protective services, foster care, law enforcement, and other professionals.

Determining whether the medical care given was harmful or potentially harmful is, ultimately, a medical decision and requires the judgment of a medical professional. This leads to our recommendation that “a pediatrician with experience and expertise in child abuse consult on the case.”

Child abuse pediatricians work collaboratively with professionals from other disciplines and will continue to do so. We are concerned that intervention may focus on the caregiver’s pathology, rather than the harm occurring to the child, and emphasize that if a child is being medically abused, the abuse must first be stopped. Whether the caretaker is treatable will vary from case to case.

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doi:10.1542/peds.2007-3519

Human Metapneumovirus and Human Coronavirus NL63

To the Editor.—

We read with great interest the article by Lambert et al that studied the role of 2 new respiratory viruses (human metapneumovirus [hMPV] and human coronavirus NL63 [hCoV-NL63]) in healthy preschool-aged children using parent-collected specimens with molecular techniques. The study showed that these viruses circulated in Melbourne, Australia, during 2003, and an association between child care and acute respiratory illness was proposed. We believe that some methodologic aspects of this study may have impaired the accuracy of the assessment of the role of these 2 viruses in such a population. Current literature shows that there are differences between respiratory samples collected by nose/throat swabs and nasopharyngeal aspirates regarding their potential to detect and identify respiratory pathogens. Tracheal secretion is less suitable for detection of respiratory viruses than nasopharyngeal washes and bronchoalveolar lavage. Another important point is the classification of symptoms, based entirely on parental experience. There are many subjective signs that, for an inexperienced person, would be difficult to recognize. All conclusions of an association between acute respiratory illness and virus incidence are based on symptom classifications (A and B), which may be incorrect.

Finally, different methods were used to determine the incidence of several respiratory viruses. It has been shown that the sensitivity and specificity of real-time polymerase chain reaction (PCR), conventional PCR, and nested PCR may be completely different. In this case, hMPV and hCoV-NL63 were identified by using the most sensitive techniques (real-time and nested PCR), which might lead to an overestimation of the role of hMPV and hCoV-NL63 in community-acquired infec-
tions. However, there are no gold standards for detection of respiratory viruses to which both conventional tests and real-time PCR can be compared.4

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REFERENCES

doi:10.1542/peds.2007-3356

In Reply.—

We thank Pilger and Cantarelli for their comments on our article. We agree that, as with all observational studies, ours had potential bias issues that may limit interpretability. The job for readers is to assess to what extent such biases invalidate the reported results.

The reference used to highlight potential issues with different specimen types was a study conducted on a variety of specimens from a relatively narrow population: children hospitalized with severe acute lower respiratory tract disease.3 In our opinion, there is a lack of data in the published literature on the broad range of community-managed acute respiratory illnesses (ARIs). For this reason, one of the aims of our study was to assess the utility of the relatively noninvasive, parent-collected nose-throat swabs. Bronchoalveolar lavage and tracheal secretions are too invasive and not suitable for a study that examines mostly upper respiratory tract disease. We feel that in community-based studies, even less invasive tests may introduce more bias (because of underreporting of ARI episodes) than they prevent if they require a disruptive home visit for collection. Any underestimation of virus-specific rates caused by using nose-throat swabs is likely to be small; the proportion of ARIs in our study that tested positive for any virus (74%)2 fell within the range of recent home-visit studies that used polymerase chain reaction (PCR) for diagnosis and nasopharyngeal aspirates (69%)3 or nasal lavage (83%).4

ARIs that require specimen collection and impact diary completion were identified in our study by parents using a simple and sensitive symptom-based algorithm.2 This method has been used in a phase III influenza vaccine-efficacy study3 and by us in a pilot study.4,5 Parents were not required to classify symptom severity, but, rather, were asked to merely identify daily presence or absence. In a poststudy questionnaire (response rate: 78%), parents in our study were asked to nominate the most difficult study procedure: keeping the daily symptom diary was nominated by only 11% of respondents.

We agree that real-time PCR, used to identify human metapneumovirus and human coronavirus NL63 in our study, is likely to be more sensitive that the conventional PCR method used to identify other viruses, but false-positive results are likely to be uncommon with either method.4 Therefore, the use of real-time PCR is unlikely to overestimate the presence of human metapneumovirus and human coronavirus NL63, but conventional PCR may lead to an underestimation of the role of the other viruses.

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REFERENCES

doi:10.1542/peds.2007-3356
Human Metapneumovirus and Human Coronavirus NL63
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Pediatrics 2008;121;445
DOI: 10.1542/peds.2007-3356

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Pediatrics 2008;121;445
DOI: 10.1542/peds.2007-3356

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