Factors predisposing to abnormal pulmonary function after adenovirus type 7 pneumonia

Sir,

I appreciate that Sly and coauthors could label the morbilliform rash before adenovirus type 7 pneumonia only as a ‘measles-like’ illness.1 It would be of interest, however, to review the data that stopped them making the diagnosis of measles. The four patients whom the late W C Marshall and I described in 19767 had measles preceding crippling bronchiolitis and pneumonia due to adenovirus. Two eventually died from respiratory failure after prolonged illness, one now has a unilateral small hyperlucent lung (McLeod syndrome), and one has severe bronchiectasis and cor pulmonale. The diagnosis of measles was based on a typical illness, occurring at the same time as siblings and other contacts had measles. In fact, in one of our patients, and subsequently in a similar child under my care, the measles antibody response in the siblings was entirely normal. Yet the immunological responses to measles in these patients were abnormal, with low or undetectable concentrations of measles HI antibody in three. Early measles complement fixation titres were normal, however, though in one child they fell to undetectable values in nine months, which is unusual. Kipps and Kaschula3 have described six cases of fatal adenovirus pneumonia after measles in underprivileged non-white children less than 4 years of age. They described an additional four patients whose fatal post-measles pneumonia was due to herpes virus. They postulated, like Warner and Marshall, that measles rendered the child immunodeficient, and susceptible to overwhelming secondary viral infection. Thus it is not surprising that among Sly’s patients those with a ‘measles-like’ illness before adenovirus pneumonia had more severe sequelae.

References

Dr Sly comments:

I thank Dr Warner for his interest in our paper.1 We described a worse prognosis for children with a previous ‘measles-like’ illness and this diagnosis was based on historical evidence provided by parents and local medical practitioners. No measles serology was available.

I agree with Dr Warner that it is likely that these children suffered from measles before contracting adenovirus infection but as this could not be proved, it was thought prudent not to claim that the illness was measles. I do not believe that this lack of proof weakens the message of the paper, that is that adenovirus type 7 pneumonia is associated with long term pulmonary sequelae and that young children or those with a history of a prior ‘measles-like’ illness are at increased risk.

Neck radiographs in croup syndrome

Sir,

I read Dr Goel’s letter1 with interest and a little surprise. The main concern with croup syndrome in Britain, where most cases have acute laryngotracheobronchitis, is to avoid missing cases of acute epiglottitis, because they are more dangerous and require more vigorous management. On top of the clinical pointers (for example shorter history, more severe obstruction, toxic child, high fever), may I suggest that the radiograph and the laryngoscope are alternative ways of doing this. Which is chosen will depend on circumstances. Direct laryngoscopy in acute epiglottitis carries a risk of precipitating complete obstruction with cardiorespiratory arrest.2 It must only be done by a doctor skilled in intubation, with correct equipment and staff at hand;3 otherwise catastrophe may ensue.4 Because of the risk, some take lateral soft tissue radiographs of the neck to show the size of the epiglottis5 instead. Evidently the former is practised in Glasgow. The latter was routine in

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clinically beneficial for infants with reflux due to a partial thoracic stomach.7 It would therefore require much more clinical evidence than is at present available to change my opinion regarding the value of this form of treatment for infants with gastro-oesophageal reflux due to a partial thoracic stomach. On the other hand, infants with gastro-oesophageal reflux but no partial thoracic stomach do not, in general, require to be treated by posture; thickening of the feeds is usually the only treatment needed.

References