plan that children presenting with diabetes insipidus should now have MRI performed with gadolinium enhancement annually for three years.

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## Cough but is it asthma?

EDITOR,—Dr McKenzie is concerned that children who cough may be inappropriately labelled and treated as having asthma.1 Modern definitions of asthma emphasise the importance of inflammatory mechanisms underlying the variety of symptoms seen in the disease.2 As Simon Godfrey has pointed out the definition and diagnosis in childhood is to a large extent empirical depending on the demonstration of 'airflow obstruction and clinical symptoms which are largely or completely reversed by treatment with bronchodilator drugs or steroids'.3 Dr McKenzie places too much emphasis on the use of lung function testing and response to β-agonists to establish the diagnosis. The bulk of the paediatric asthma population is under 5 years of age, a group too young to undergo any practical form of lung function testing. Even in those capable of performing lung function tests, no one test is totally sensitive and specific. Improvement in lung function may require a period of anti-inflammatory treatment. Such is the case, of course, in acute severe asthma where initial response to an inhaled β-agonist may be very poor. In this situation airway reversibility and clinical improvement usually requires the use of oral or intravenous steroids. In the event, therefore, of symptoms being atypical, such as cough without wheeze, the only way the diagnosis can be established is by excluding other causes of cough and embarking on an empirical trial of anti-inflammatory treatment with bronchodilator for relief. In this respect we would depart from the British Thoracic Society guidelines for the management of chronic asthma in children and suggest optimising an initial dose of inhaled steroid for a trial period of two months.2 In the presence of a response a step-down approach to the minimum dose necessary to alleviate symptoms could be advised. A lack of response would make the diagnosis less

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- 1 McKenzie S. Cough but is it asthma? Arch Dis Child 1994; 70: 1-2.
- Cnua 1994; 70: 1-2.
  2 British Thoracic Society. Guidelines on the management of asthma. Thorax 1993; 48: S1-24.
  3 Godfrey S. What is asthma? Arch Dis Child 1985; 60: 997-1000.

## Dr McKenzie comments:

There is no proof that corticosteroids are useful antitussives. Their place in the management of children who cough with no other symptoms has yet to be described.

## Renal scarring after acute pyelonephritis

EDITOR,—Jakobsson and colleagues are to be congratulated on their study which further weakens the evidence for causality in the association of urinary tract infection, vesicoureteric reflux, and renal scarring.1

The authors do not seem to have considered the possibility that the DMSA scan abnormalities in the 37 kidneys scarred two years after the pyelonephretic episode might have been present before that episode.

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1 Jakobsson B, Berg U, Svensson L. Renal scarring after acute pyelonephritis. *Arch Dis Child* 1994;

Dr Jakobsson and colleagues comment:

The question asked by Dr Chambers is briefly addressed in the discussion of our paper. It is difficult to be certain that the kidneys have not been damaged before a pyelonephretic episode. This is not a specific problem in studies using DMSA scans as renal scarring is most often detected at the primary investigation after acute pyelonephritis even when other imaging methods are used.1 The median age of the children in our study was low, and the children were studied with DMSA scans on three occasions, allowing us to follow the development of renal changes. Moreover, the previous medical history was thoroughly ascertained. We therefore feel, with a possible exception of the four older girls mentioned in our discussion, that this circumstantial evidence strongly argues against Dr Chambers' concern. More importantly, we do not think that the question affects the main conclusions of our study.

1 Smellie JM, Ransley PG, Normand ICI, Prescod N, Edwards D. Development of new renal scars: a collaborative study. *BMJ* 1985; **290**: