Clinical audit

Do Accident and Emergency Senior House Officers know the British guidelines on the management of acute asthma?

T Ulahannan, RD Hardern, DW Hamer

Summary
Avoidable deaths from asthma continue, even in hospital. Since the management of acute severe asthma is often initiated in the Accident and Emergency department, it is crucial that staff there have adequate knowledge.

An anonymous questionnaire, containing items based on chart 6 of the UK guidelines, was completed by 66 Accident and Emergency Senior House Officers from the Yorkshire region. The study aim was to establish these doctors' levels of knowledge about the recommended management of acute asthma in Accident and Emergency. The median score was 10 (out of a possible 24) and the interquartile range 8–13. Further efforts are required to implement these guidelines so that the best patient outcomes can be achieved.

Keywords: asthma, guidelines, audit

Asthma remains a major health concern.1 Avoidable deaths continue even in hospital. Studies assessing the factors involved in potentially preventable deaths have shown that the management of acute asthma is often inadequate2 (common deficiencies include under-treatment, inappropriate treatment and underestimation of severity by both doctors and patients). It is vital, therefore, that junior staff in Accident and Emergency departments, where many cases of acute asthma are first treated, initiate appropriate management.

If guidelines are to improve patient care two conditions must be satisfied: first, their content must be correct and, secondly, doctors must use them. Inadequacies in either development or implementation of guidelines may prevent their achieving the anticipated improvement in the knowledge or behaviour of clinicians and, therefore, patient outcomes.3 Consensus guidelines for the management of asthma have been published in the UK.4 The aim of their developers was to improve the standard of care received by patients with asthma. Several other authors or bodies have published guidelines for the management of asthma, and the quality of some of these is poor.3

The aim of this study was to assess the level of knowledge of Accident and Emergency Medicine Senior House Officers, of the recommended management of adults with acute severe asthma.

Subjects and methods
All Accident and Emergency Senior House Officers in the Yorkshire region attend an induction course. In August 1994 every one of them was given questions (available from the authors) about the management of acute asthma. These covered aspects of the initial assessment, treatment and disposition of adult patients with acute asthma (based on chart 6 of the British Thoracic Society guidelines: Asthma in Accident and Emergency Departments). The highest possible score was 24. One mark was awarded for each correct answer. No marks were deducted for incorrect answers. The replies, which were written, were anonymous.

Results
Sixty-six questionnaires were returned (of 97). The median score was 10 (out of a possible 24) and the interquartile range 8–13.

Discussion
Awareness among Accident and Emergency Senior House Officers of the national guidelines for management of acute asthma was low. These doctors deal with acute asthma frequently and need adequate knowledge to provide appropriate management. Furthermore, many doctors from clinical specialties work in Accident and Emergency during their training; educational efforts directed at Accident and Emergency staff will benefit other specialties.

Publication of the guidelines in Thorax and in the British Medical Journal (without specific

<table>
<thead>
<tr>
<th>Summary points</th>
</tr>
</thead>
<tbody>
<tr>
<td>• despite publication of national guidelines for the management of asthma, the level of awareness of these guidelines among junior doctors in Accident and Emergency is poor</td>
</tr>
<tr>
<td>• publication of guidelines seems unlikely to influence the process of care or patient outcome unless additional strategies are used to implement them.</td>
</tr>
</tbody>
</table>
Familiarity with asthma guidelines

...efforts to target groups such as Accident and Emergency staff) has clearly not led to adequate knowledge of their content. Patient care is, therefore, unlikely to be improved by the guidelines. Considerable work is required to implement these guidelines effectively, as without effective implementation they cannot improve patient outcomes. Strategies that we plan to investigate include the provision of personal laminated copies of the guidelines for all medical staff, the use of a structured form to record data and guide management, and 'educational outreach'.

4 Guidelines on the management of asthma. Statement by the British Thoracic Society, the British Paediatric Association, the Research Unit of the Royal College of Physicians of London, the King's Fund Centre, the National Asthma Campaign, the Royal College of General Practitioners, the General Practitioners in Asthma Group, the British Association for Accident and Emergency Medicine and the British Paediatric Respiratory Group. Thorax 1993; 48: S1–S24.

---

Medical Anniversary

NORMAN BETHUNE, 3 MARCH 1890

Norman Bethune (1890–1939) was born in Gravenhurst, Ontario, to an old Canadian family tracing its ancestry to Scots and French Huguenots. His grandfather had been a founding doctor of the medical faculty of Trinity College, Dublin, and his father was a Presbyterian minister. Like Osler he was born in a manse, and graduated in medicine in Toronto. He contracted tuberculosis so he decided to dedicate himself to its eradication by becoming a thoracic surgeon. He organised a mobile blood bank during the Spanish Civil War and then served in China during the Sino-Japanese War. He set up an emergency scheme to train the Chinese to become doctors in one year and nurses in six months in order to combat large wartime casualties. His selfless devotion to duty made him legendary, and several statues have been erected throughout China to 'Pai Ch'ien' (his name converted phonetically into Chinese). On 12 November, 1939 he died from septicaemia from a cut finger while operating. He is interred in the Cemetery of Martyrs in Shih-Chia-Chuang. A Norman Bethune museum is maintained in his birthplace. – DG James