An audit of the management of asthma patients in an accident emergency departmen

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Abstract

Aim
To assess how the management of asthma in an Accident an Emergency Department (A&E) complies with the Guidelines of Th British Thoracic Society and to assess the extent of involvement o the General Practitioner in the management of acute exacerbations o asthma in the community .

Method
A retrospective audit of asthma presentations to a North Londo Accident and Emergency Department during the period Novembe 1999 to May 2000

Result
64 Casualty Cards were analysed . The frequency with which eac of 8 clinical features indicating asthma severity was recorded range from 37% to 98%. Expected peak flow was recorded in 50% o patients . Of the 57 patients discharged , 35 had undertaken a repea peak flow, and in 31 cases the last recorded repeat peak flow wa more than 60% of the patient's normal or expected level (60% bein the threshold suggested by the BTS at which discharge from A& might be considered if the patient is stable or improving). 1 patients were recorded as having seen their GP prior to presentatio to A&E. 17 of the patients discharged were recorded as having bee instructed to see their GP for follow up

Conclusion
Compliance with BTS Guidelines would be improved if a mor detailed history was taken from patients and if greater emphasis wa placed on the recording of pre and post nebulizer peak flo measurements .The role of the GP in asthma management might b promoted if patients discharged from A&E are more strongly urge to visit their Practice .

Introductio

About 1250 deaths per year in England and Wales ar certified as due to asthma. The Guidelines produce by the British Thoracic Society were published in Supplemental issue of Thorax in1997 together wit charts relating to the management of asthma i specific contexts . Chart 5 is entitled "Asthma i Accident and Emergency Departments" [1] Th Guidelines aim to reduce the morbidity and mortalit associated with asthma and they stress the role of th General Practitioner (GP) in managing asthma in th community

Metho

A list of patients presenting to a North Londo Accident and Emergency (A&E) Department betwee the ages of 16 and 80 was obtained, where "Asthma was either the presenting complaint as entered by th reception staff or the diagnosis made by the Casualt Officer. A total of 253 patients presented wit asthma as defined, during the period November 199 to May 2000 and a sample of 64 was selected applying a random number table to the list of the 25 patients as identified by their A&E departmenta number.

Criteria and Standard

The criteria adopted for audit were based on thos features highlighted in Chart 5 of the Supplementa Issue of Thorax which accompanied the 1997 BT Guideline [1] A standard of 100% for the recording o these criteria was set

Result

Symptom duration was recorded in 59 of the 6 attendances. For 37 patients onset was within the 2 hours immediately prior to presentation, with 6 (16% having been seen by their GP. Of the 22 patients wit d longer duration of symptoms, 7 (32%) had consulte their GP, while of the 8 patients who used regula home nebulisers, only 1 had seen their GP in the wee prior to presentation to A&E; two of these wer admitted to hospital. Of the 5 patients who ha exhausted their salbutamol inhalers during the curren exacerbation, 2 smoked 10 cigarettes per day and on presented to A & E intoxicated. The recording o clinical parameters to assess asthma severity is give in Table 1

Table 1: The recording of clinical parameters t assess asthma severit

Clinical featur	Percentage of cards recorded	Standard se
	%	%
Speech characte	7	00
Puls	9	00
Respiration rat	8	00
Pulse oximetr	9	00
Initial peak flo	8	00
Expected peak flo	0	00
Current medicatio	9	00
Previous admission histor	3	00

Table 2: Adherence to the BTS discharg guidelines for the 57 patients who were no admitte

Featur	% discharge	Standard se
	%	%
Repeat PEF performe	6	00
Last PEF > 60% of norma	8	00
(where repeat performed		
Instruction to see G	0	00
decorded in car		
Separate GP Letter writte	5	N/
Returned to A&E after	5	N/
discharg		

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Adherence to the BTS discharge Guidelines for th 57 patients who were not admitted is given in Table 2.

Discussio

Contact with general practitioner

Only 20% of case notes had a recorded consultatio with the patient's GP within the previous week. Thi is lower than that obtained during the census i September 1994 of asthma presentations to UK A& Department [2] where 36% of patients reported seein their GP in the 7 days prior to presentation

Compliance with bts guidelines in A&

In comparison with the BTS Standards the frequenc of recording of the key clinical features assessin asthma severity varied from 37% (for the noting o previous admission history) to 98% (for th recording of pulse oximetry levels) , yet only patients returned to the department within 24 hours o discharge, (one sent by their GP) of whom two wer admitted

Adherence to the BTS treatment guidelines is mor difficult to achieve when important informatio regarding the history of the exacerbation is no obtained, and expected peak expiratory flow (PEF) i not recorded (half of our sample), and where pos nebuliser PEF is not recorded (in 39% of the patient discharged in this study).

In the British Thoracic Association's (now known a the BTS) confidential enquiry into death from asthm in the West Midlands and Mersey regions in 1982 failure to assess the severity of acute asthma, on th part of patient and relatives as well as doctors, wa considered to have contributed to under-treatment an preventable death [3]

Recommendation

Standard

The British Thoracic Society might consider sendin copies of its new Guidelines to Casualty Department for distribution to each cohort of Senior Hous Officers (SHOs)

General practic

GP's might consider how to persuade patients whos symptoms are developing gradually, rather than o sudden onset, to consult earlier in an exacerbation The provision by the GP of a written self managemen plan would seem particularly appropriate for patient with home nebulisers, who might otherwise defe seeking medical attention

The Cochrane review of 22 studies comparing sel management education with usual care suggested tha self management education reduces hospitalisation and A&E visits [4]

Accident and Emergency departments (A&E

The recording of the key clinical features indicatin asthma severity might be improved by th introduction of a preprinted record form fo completion by the doctor ; this would provid sufficient information to enable an assessment of th patient according to the BTS Guidelines

Compliance with the Guidelines could then b deaudited to identify whether the intervention had le to an improvement.

A revised and more detailed discharge summary fo GPs might help address the schism between th primary and hospital management of many of th patients presenting to A&E. ■

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Reference

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