Management of acute asthmatic attacks in a local emergency department before and after the introduction of guidelines

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Introduction: Objective assessment and management of acute asthma is often sub-optimal in busy emergency departments. This study examined the effect of the introduction of guidelines on asthma management in the emergency department. Materials & Methods: All patients (>2 years old) presented to the emergency department for acute asthmatic attacks over a period of 1 year were included. Guidelines for the management of acute asthma were introduced after the first quarter of the study year. Analysis was made to compare the assessment, treatment and discharge planning of patients presenting with acute asthma to the emergency department before and after the introduction of the guidelines. Results: After the introduction of the guidelines, there was a significant increase in the measurement of peak expiratory flow rate (PEF) and oxygen saturation as part of patient assessment for asthma severity. Such an improvement did not result in a change in hospital admission rate. There was a significant increase in the proportion of patients discharged with a course of oral corticosteroids, a significant reduction in the use of oral bronchodilators in the younger age group and antibiotics in the older age group. Conclusions: The introduction of guidelines for the management of acute asthma and education of the clinicians in the emergency department has resulted in improvement in the overall management and discharge planning for asthma patients. (Hong Kong j.emerg.med. 2002;9:131-138)

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