

TOWARDS EFFECTIVE ASTHMA CARE

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INTRODUCTION

The focus of this issue is on asthma care. This is the second skills course on asthma to be published in the Singapore Family Physician. The first course was published in 2003. Singapore is ranked as an intermediate risk country for asthma prevalence (4.9%) and a very high-risk country for asthma death¹. Asthma disease results in days lost from work and school as a result of exacerbations. Further, there are still deaths from this preventable disease. Today's patient have access to better trained health care team and resources. However asthma still remained under-diagnosed and under-treated. What needs to be done is a set of strategy for the management of asthma that aims to achieve and maintain disease control.

Undertreatment

One problem is undertreatment. There are several reasons for this and we will need to work with patients to overcome them in order to be effective. One reason for the widespread under treatment of asthma is that persistent low grade disease symptoms are usually under recognized by patients and hence go undetected and untreated by doctors; this can be remedied by the use of a check list of symptoms for all patients at every visit¹. Many of these can be downloaded free of charge from the internet. Examples include the Multi-coloured simplified Asthma Guideline Reminder (MSAGR) for better adherence to National Asthma Guideline (<http://www.elp.ttuhs.edu/asthma>) and the Canadian Consensus Guideline adult asthma treatment checklist (<http://www.asthmaguideline.com>). Another reason is that both patients and doctors may be reluctant to take the extra effort to learn new coping habits for a problem, which may come and go over many months and years. The fear of using "expensive" long term treatment and risk of side effects is another barrier to adequate treatment. The current stepped strategy of using low dose inhaled steroids followed by adding on long acting beta agonists ensure best cost-effectiveness both with regards to expenditure and side effects. This new long term cost savings plan should be explained to patients at the very beginning of therapy².

Classification of Asthma

The classification of asthma is based on the symptoms the patient had before treatment. However, once treatment starts the classification becomes more difficult. Asthma is a variable disease. A patient's asthma rarely remained in the same category all the time. Further patients often underestimate their symptoms and are therefore classified incorrectly. Selection

of asthma medications is based on diagnosis and classification of the severity of the asthma. This is a challenge to the Family Physician because of the variability of the presentation of the disease. The patients often treat the Family Physician as a "fire extinguisher" to put out the acute exacerbations. The classification of asthma also did not take into account the activity level of the asthmatic. When this is considered, many patients' asthma was indeed more severe than initially thought. A case in point is given below.

Case illustration

Andy is a four year-old boy studying in a local nursery. He has no family history of asthma, rhinitis or atopic eczema. He presented to his family doctor with cough, running nose and wheeze. He was diagnosed to have "Bronchitis" and given Rhinathiol promethazine, chlorpheniramine syrup and ventolin syrup. Three days later, his mother noted that Andy has become breathless, unable to speak in full sentences and said that he saw a "ghost" – probably the effect of hypoxia.

This case illustrates the point that asthma in the child can be under diagnosed and under treated. There may also be reluctance on the part of the Physician to label a child as asthmatic. The diagnosis of asthma in a child below the age of 4 is also less easy as there are many causes of wheeze at this age.

The initial classification of Andy would have been that of mild asthma. However, based on his subsequent symptoms, he has severe disease. Andy was referred by his Family doctor to the National University Hospital and was admitted to the Intensive Care Unit.

Encourage Self-management of asthma

There is good evidence now to show that patient self-management through monitoring of asthma symptoms, seeking regular medical reviews with or without symptoms and using a written asthma action plan improve outcome. Clinical trials using such methods have showed a dramatic decrease in morbidity of asthma³. Patient in such a program are also more compliant to treatment regime.

Written asthma action plan

The use of the written asthma plan is in the self-management of asthma. It is hoped that it will reduce the incidence of hospital admission, emergency visits and unscheduled visits to the Doctor. It teaches the patient how to adjust their medications based on peak flow readings or symptoms. Though there are studies to show that asthma action plan are associated with a reduction in mortality, the data to support its use is not always inconclusive. Perhaps, there is a need to work with the patient to ensure that he or she understands what is in the plan. Even before this step is taken, there is a

need to ensure that the patient's accepts the fact that he has a condition that requires self management. There is therefore much work to be done on each individual patient before the written asthma action plan becomes a helpful tool.

Inhaled Corticosteroids (ICS)

The regular use of ICS has been shown to be safe in children and adults. It reduces hospital admission and decrease death from asthma. Long-term studies have so far established that ICS in the recommended dosage does not have significant or irreversible effects.

The CAMP (childhood asthma management program: a perspective trial involving more than 1000 mild asthmatic children) compared budesonide with other medications such as nedocromil and placebo, showed that the children on Budesonide has better outcomes⁴. It firmly established the safety of the drug. However the trial did not show any evidence that ICS prevent the progressive decline of lung function in the children or prevented the worsening of the asthma. Once the treatment was stopped, the symptoms and hyper responsiveness of the airway returned. The need for continuing use of ICS may be required. Further clarification from research will be needed.

CONCLUSION

The journey towards effective care in asthma requires the attention to details for each patient. Checking out the patient's perception, knowing the operational reasons for undertreatment. Diagnosis and treatment will pose clinical issues that need to be tackled. Physician should be trained to adhere to treatment guideline and education of the public is needed to move them away from treating the practitioner as a fire-extinguisher. We should move away from acute care of exacerbations with relievers towards more preventive care with regular use of preventive medication. This asthma skills course will provide a forum for sharing of thoughts and challenges.

REFERENCES

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