

The 5 x 5 plan for asthma control: the green route to asthma control

Robin Green^{a*}

^aDepartment of Paediatrics and Child Health, University of Pretoria

*Corresponding author, email: robin.green@up.ac.za

Abstract

Apart from medication to control asthmatic inflammation, the education of patients and parents is the most important therapeutic step in achieving asthma control and normal life. This is a critical, but sadly often neglected, activity. It can be stated with certainty that an asthmatic who does not know the information outlined in this paper will never be free of asthma symptoms. Education is important at every visit, and is not time consuming or difficult to perform. This plan is easy to remember and use.

Keywords: asthma, GINA, Global Initiative for Asthma, inflammation, allergens

Introduction

Apart from medication to control asthmatic inflammation, the education of patients and parents is the most important therapeutic step in achieving asthma control and normal life. This is a critical, but sadly often neglected, activity. It can be stated with certainty that an asthmatic who does not know the information outlined in this paper will never be free of asthma symptoms. Education is important at every visit, and is not time consuming or difficult to perform. This plan is also easy to remember and use.

The five principles

Five important principles, listed in Table 1, need to be followed in order for a patient to obtain total or significant control of his or her asthma, a normal quality of life and to be free of asthma morbidity.

Five action steps need to be implemented for each of the principles.

It is vital to inform patients of the five steps listed in Table 2, and also to demonstrate them, where applicable.

A number of educational brochures are available on the National Asthma Education Programme website,¹ and can be accessed free of charge. The five most important of these are highlighted in Table 3.

Therefore, education with home material is critical at the first visit or consultation at which the asthma diagnosis is made. The patient will be able to go home with this knowledge and his or her prescription for controller and reliever therapy, and if a young child, with a spacer.

Table 1: Five important principles to achieving asthma control

1. Educate the patient or parent of a child with asthma
2. Give the patient or parent written material to take home and read
3. Assess control at every visit
4. Fix poor control if the patient is not well controlled
5. Take asthma seriously

Table 2: Steps to educating an asthmatic

1. Asthma is inflammation
2. Daily anti-inflammatory or controller therapy must be used
3. The correct inhaler technique must be used and checked
4. Triggers and irritants (allergens, cigarette smoke and drugs) must be avoided
5. Action must be taken when asthma control is poor

Table 3: National Asthma Education Programme asthma education brochures¹

1. What is asthma?
2. Keeping asthma under control
3. An action plan
4. Asthma medicines and how they work
5. Join the National Asthma Education Programme

Table 4: Asthma control questions

1. Do you experience any symptoms during the day?
2. Do you experience any symptoms at night?
3. Do you experience symptoms when exercising?
4. How many puffs of the reliever pump did you use in the last week?
5. Have you experienced any asthma attacks which necessitated taking days off work or school?

The patient should return for a follow-up, usually after the first month, and then 3-6 monthly thereafter. The primary responsibility at each visit is to ensure that he or she is well controlled, that the symptoms have gone and that health-related quality of life has returned. The most important questions

Table 5: Asthma control assessment from the Global Initiative for Asthma²

| A. Symptom control | | | Level of asthma symptom control | | |
|--|------|-----|---------------------------------|-------------------|--------------|
| | | | Well-controlled | Partly controlled | Uncontrolled |
| In the past 4 weeks, has the patient had: | | | | | |
| • Daytime asthma symptoms more than twice a week? | Yes? | No? | None of these | 1–2 of these | 3–4 of these |
| • Any night waking due to asthma? | Yes? | No? | | | |
| • Reliever needed for symptoms more than twice a week? | Yes? | No? | | | |
| • Any activity limitation due to asthma? | Yes? | No? | | | |
| B. Risk factors for poor asthma outcomes | | | | | |
| <ul style="list-style-type: none"> • Assess the risk factors at diagnosis and periodically • Measure the FEV₁ at the start of treatment, then after 3–6 months of treatment to record the patient's personal best, then periodically for ongoing assessment | | | | | |
| Assess the patient's risks with regard to: | | | | | |
| <ul style="list-style-type: none"> • Exacerbations • Fixed airflow limitation • The side-effects of medication | | | | | |

FEV₁: forced expiratory volume in one second

Table 5: The most common reasons for poor asthma control

1. Not using the controller medication regularly (non-adherent)
2. An inability to use the pressurised metered dose inhaler or powder device
3. Ongoing irritant exposure
4. An untreated co-morbidity, especially untreated allergic rhinitis
5. Not enough medicine

required when conducting an asthma control assessment are indicated in Table 4.

Determining whether or not the patient's symptoms are well controlled can be achieved by using the Global Initiative for Asthma (GINA) protocol (Table 5), and depends upon the number of "yes" answers provided by the patient to a series of questions.²

The final set of five management principles should be used to remedy the reasons for poor control, the most common of which are listed in Table 5.

A step up in medication is the least important step, but is sometimes necessary if everything else is being performed correctly and the asthmatic is still symptomatic.

Conclusion

If these easy-to-follow principles and steps are implemented, asthma patients will benefit from better asthma control and an improved lifestyle. In addition, performing these steps does not take long.

References

1. National Asthma Education Programme [homepage on the Internet]. 2015. c2015. Available from: www.asthmasa.org
2. Global Initiative for Asthma [homepage on the Internet]. 2015. c2015. Available from: www.ginasthma.org