Allergy Education

A MORE THOROUGH ASTHMA APPOINTMENT COULD HELP IMPROVE ASTHMA CONTROL AND SAVE LIVES

The National Review of Asthma Deaths (NRAD) recommends that a thorough, structured asthma review takes place annually.[1]

NRAD also identified that in the year before death, triggers for asthma attacks had not been documented in approximately 50% of cases.[1]

Patients may respond differently to their medication and environmental triggers; this asthma review template has been designed to help you tailor care for your patients.

This template was developed in collaboration with Professor Somnath Mukhopadhyay MD PhD FRCPCH, Chair in Paediatrics at Brighton and Sussex Medical School and with Dr David Cremonesini (BA (OXON) FRCPCH), Specialist Paediatrician with Allergy & Respiratory expertise at the American Hospital Dubai

brighton and sussex medical school

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PATIENT NAME .....

DATE .....

1 HISTORY AND PHYSICAL EXAMINATION

Ask questions regarding the patient's personal and family history of asthma and allergic disease, and consider the number of exacerbations (GP visits, prescription of oral steroids, emergency department visits, hospital admissions) over the previous 12 months:[2,3]

Is there a personal history of eczema/rhinitis/allergies/other relevant conditions?

◯ Yes ◯ No Pattern, frequency, and severity of symptoms:

.....

Is there a family history of asthma/eczema/rhinitis/allergies/other relevant conditions?

◯ Yes ◯ No Pattern, frequency, and severity of symptoms:

.....

What is the pattern and frequency of asthma symptoms?

◯ All-year-round ◯ Seasonal ◯ Worse at night ◯ Other

Do symptoms abate when the patient is not at home?
(If so, consider asking questions about the home environment, e.g. is there mould present, are there pets?)

◯ Yes ◯ No .....

Do symptoms get worse when the patient is not at home?
(If so, consider asking questions about the location, e.g. a friend's house with a pet cat)

◯ Yes ◯ No .....

2 REVIEW CONTROL

Use these questions to quickly assess your patient's control:[3]

In the past 4 weeks, has the patient had:

Daytime symptoms more than twice/week?	◯ Yes	◯ No
Any night waking due to asthma?	◯ Yes	◯ No
Reliever needed more than twice/week?	◯ Yes	◯ No
Any activity limitation due to asthma?	◯ Yes	◯ No

Well controlled = 4 'no' answers ◯

Partly controlled = 1-2 'yes' answers ◯

Uncontrolled = 3-4 'yes' answers ◯

Using the questions above, educate the patient on the definition of 'well controlled'

Consider referral to secondary care if the patient is poorly compliant, has been prescribed >2 courses of oral steroids or been admitted to hospital in the past 12 months

3 REVIEW TRIGGERS

NRAD recommends that factors that trigger or exacerbate asthma must be elicited routinely and documented in the medical records and personal asthma action plans of all patients with asthma[1]

What triggers the patient's asthma or allergic (e.g. rash, swelling) symptoms?

- ◯ Seasonal triggers: pollens (e.g. trees, grasses, weeds) or moulds
  .....
- ◯ Night-time triggers (e.g. house dust mite)
  .....
- ◯ Food allergens (e.g. egg, milk, fish, shellfish, soya bean, nuts)
  .....
- ◯ Pets (e.g. cat, dog, guinea pig, rabbit, horse)
  .....
- ◯ Exercise
  .....
- ◯ Other (e.g. drugs, occupational, hormonal)
  .....

CONFIRM THE LIKELY TRIGGERS:

Based on the results of the allergy-focused clinical history, if IgE-mediated allergy is suspected, either specific IgE blood tests or skin prick tests* should be performed. Specific IgE testing can be performed on any patient irrespective of age, allergic symptoms and medication. Just 1 ml of blood is needed to test for up to 10 allergens. Test results should be interpreted alongside the allergy-focused clinical history.[4] A specific IgE result of ≥0.1 kU_A/L indicates sensitisation.

Patient with...

Asthma and confirmed food allergy	Asthma and confirmed pollen/mould allergy	Asthma and confirmed pet allergy	Asthma and confirmed house dust mite allergy
Refer to secondary care Ensure the patient's asthma is well controlled and consider prescribing an adrenaline autoinjector	Consider seasonal daily antihistamines and nasal steroids Consider adapting asthma medication	Optimise treatment and consider regular antihistamines Discuss removal of pet or environmental avoidance measures	Consider regular antihistamines and nasal steroids if symptoms persist Discuss avoidance measures

4 REVIEW TREATMENT

NRAD identified that 43% of asthma patients had not had an asthma review in the previous 12 months[1]

Ask questions regarding treatment compliance:

In an average week, how many times does the patient forget to take their preventer medicine?

◯ 1 or 2 times ◯ 3 or 4 times ◯ 5 or 6 times ◯ 7 or 8 times ◯ >9 times

Does your patient think their medicine is working? ◯ Preventer ◯ Reliever

Educate the patient on the importance of taking their preventer inhaler regularly

Consider prescription of additional treatments for allergic symptoms, especially for patients with concomitant rhinitis (>80% of patients with asthma also suffer from rhinitis[5])

5 REVIEW INHALER TECHNIQUE

Check technique for every type of inhaler used; vist the **Asthma UK** website for videos on correct inhaler technique

WHAT NEXT?

NRAD identified that 77% of asthma patients did not have a personal asthma action plan[1]

- If asthma control is poor, consider re-evaluating the patient's treatment in conjunction with the **BTS/SIGN** guidelines[2]
- Update the patient's personal asthma action plan. Ensure all new patients have a plan in place
- For further resources and practical information about diagnosing and managing allergy, and for an asthma action plan template, visit **www.AllergyEducation.co.uk**

* Skin prick tests should only be undertaken where there are facilities to deal with an anaphylactic reaction[4]

INTERPRETING QUESTIONS TO HELP IDENTIFY ALLERGY IN PATIENTS WITH ASTHMA

Is there a personal history of eczema/rhinitis/allergies/other relevant conditions?

If the patient has an allergic history, the likelihood of developing other allergic conditions is increased.

Is there a family history of asthma/eczema/rhinitis/allergies/other relevant conditions?

If a relative has an allergic history, this increases the likelihood that the patient may have an allergic condition.

What is the pattern and frequency of asthma symptoms?

This information may help you identify seasonal allergens and tailor the patient's treatment plan accordingly, e.g. night-time symptoms suggest house dust mite allergy.

Do symptoms abate when the patient is not at home?

(If so, consider asking questions about the home environment, e.g. is there mould present, are there pets?)

If symptoms abate when the patient is not at home, it is likely the allergic trigger is located in the home.

Do symptoms get worse when the patient is not at home?

(If so, consider asking questions about the location, e.g. a friend's house with a pet cat)

If symptoms are worse in certain locations, this may help determine potential triggers.

What triggers the patient's asthma or allergic (e.g. rash, swelling) symptoms?

This information will help you identify allergic triggers. If allergic symptoms are triggered by exercise, you should refer the patient for further investigation in secondary care as they may be at risk of exercise-induced anaphylaxis. Patients with confirmed food allergy and concomitant asthma should also be referred to secondary care.

References:

1. Why asthma still kills - the National Review of Asthma Deaths (NRAD). Confidential enquiry report - May 2015. Available from: https://www.rcplondon.ac.uk/file/868/download?token=3wikiuFg; last accessed November 2015. **2.** British Thoracic Society and Scottish Intercollegiate Guidelines Network Asthma Guidelines 2014. Available from: https://www.brit-thoracic.org.uk/document-library/clinical-information/asthma/btssign-asthma-guideline-2014; last accessed November 2015. **3.** Global Initiative for Asthma Guidelines. 2014. Available from: http://www.ginasthma.org/local/uploads/files/GINA_Pocket_2014_November.pdf; last accessed November 2015. **4.** National Institute for Health and Care Excellence. Food allergy in children and young people (CG116). 2011. London: National Institute for Health and Care Excellence.

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