

**A SELECTION OF TEN CURRENT READINGS ON TOPICS RELATED TO
ALLERGY IN RESPIRATORY AIRWAY DISEASE AND BEYOND
AVAILABLE AS FREE FULL-TEXT OR REQUIRING PAYMENT**

Selection of readings made by A/Prof Goh Lee Gan

Reading 1 - ASTHMA CONTROL TEST

Zhou X, Ding FM, Lin JT, Yin KS. Validity of asthma control test for asthma control assessment in Chinese primary care settings. Chest. 2009 Apr;135(4):904-10. Epub 2008 Dec 31.

URL: <http://www.chestjournal.org/content/135/4/904.full.pdf+html>
(free full text)

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ABSTRACT

OBJECTIVE: To evaluate the validity of the Asthma Control Test (ACT) for assessing clinical asthma control in Chinese patients in primary care settings.

METHODS: This multicenter study involved 403 asthma patients from 15 primary care settings in China, who had completed the ACT, Asthma Control Questionnaire (ACQ), and spirometry testing. According to the rating of asthma control by asthma specialists in line with the Global Initiative for Asthma 2006 guidelines, patients were divided into uncontrolled, partly controlled, and controlled groups to evaluate the reliability, empirical validity, and screening accuracy of the ACT. The screening accuracy of the ACT and ACQ was analyzed comparatively, and the asthma control levels rated by the patients and the specialists were also compared.

RESULTS: The five-item ACT had an internal consistency reliability of 0.861 and a correlation coefficient with the specialists' rating of 0.697. The ACT scores showed significant differences between different levels of FEV(1) percent predicted ($F = 37.59$; $p < 0.0001$) and specialists' ratings of asthma control ($F = 169.53$; $p < 0.0001$), and also between patients requiring different treatment adjustments ($F = 111.33$; $p < 0.0001$). The asthma was controlled for an ACT score of ≥ 20 , partly controlled for scores of 19 and 18, and uncontrolled for a score of ≤ 17 . The ACT showed similar percentages of correctly classified results with ACQ. The patients' self-rated asthma control level was significantly higher than that rated by the specialists ($z = 5.93$; $p < 0.0001$).

CONCLUSIONS: The ACT is reliable, valid, and practicable for asthma control assessment in Chinese patients in the primary care setting. results seem to be clinically relevant for public health, in particular for encouraging a Mediterranean-like dietary pattern for primary prevention of major chronic diseases.

Reading 2 - SEVERE ASTHMA: APPROACH AND MANAGEMENT

Reddy RC. Severe asthma: approach and management. Postgrad Med J. 2008 Mar;84(989):115-20; quiz 119.

URL: <http://pmj.bmj.com/cgi/content/full/84/989/115> (payment required)

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ABSTRACT

Management of severe asthma remains a significant challenge. Patients with this condition do not respond adequately to inhaled corticosteroids and bronchodilators, forcing a search for alternative strategies. The clinician's initial priority is to firmly establish the diagnosis of severe asthma, as many conditions can mimic and/or aggravate this disease. Once the diagnosis is confirmed and confounding variables addressed, a variety of pharmacological and non-pharmacological approaches must be considered. Continuous use of oral corticosteroids carries a risk of significant adverse effects. Leukotriene modifiers and antibodies to IgE are effective for some patients but not for many others. Alternative anti-inflammatory drugs and novel or unconventional modalities may also be used. Although severe asthma remains a clinical dilemma, a rational diagnostic and therapeutic strategy can be used to improve patient outcomes. All stages of kidney disease. This article summarises CARI guidelines on Nutrition and growth in kidney disease and forms part of a series of articles on aspects of management of patients with chronic kidney disease.

Reading 3 - FOOD ALLERGIES: DETECTION AND MANAGEMENT

Kurowski K, Boxer RW. Food allergies: detection and management. Am Fam Physician. 2008 Jun 15;77(12):1678-86.

URL: <http://www.ncbi.nlm.nih.gov/pubmed/18619076> (payment required)

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ABSTRACT

Family physicians play a central role in the suspicion and diagnosis of immunoglobulin E-mediated food allergies, but they are also critical in redirecting the evaluation for symptoms that patients are falsely attributing to allergies. Although any food is a potential allergen, more than 90 percent of acute systemic reactions to food in children are from eggs, milk, soy, wheat, or peanuts, and in adults are from crustaceans, tree nuts, peanuts, or fish. The oral allergy syndrome is more common than anaphylactic reactions to food, but symptoms are transient and limited to the mouth and throat. Skin-prick and radioallergen sorbent tests for particular foods have about an 85 percent sensitivity and 30 to 60 percent specificity. Intradermal testing has a higher false-positive rate and greater risk of adverse reactions; therefore, it should not be used for initial evaluations. The double-blind, placebo-controlled food challenge remains the most specific test for confirming diagnosis. Treatment is through recognition and avoidance of the responsible food. Patients with anaphylactic reactions need emergent epinephrine and instruction in self-administration in the event of inadvertent exposure. Antihistamines can be used for more minor reactions.

Reading 4 - FOOD ALLERGY IN ADULTS

Wrobel JP, O'Hehir RE, Douglass JA. Food allergy in adults. Aust Fam Physician. 2008 Apr;37(4):222-6.

URL: <http://www.racgp.org.au/afp/200804/200804wrobel.pdf> (free full text)

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ABSTRACT

BACKGROUND: There is a marked increase in the prevalence of food allergies. Food allergy can cause fatal anaphylaxis and the victims are most often adolescents and young adults.

OBJECTIVE: This article focuses on IgE mediated food allergy and provides a review of the diagnostic and management strategies for food allergy, including a treatment algorithm for anaphylaxis. The role of the general practitioner in food allergy, when to refer to an allergist, and how to support patients with food allergies long term, including survival tips for patients with food allergy, are also discussed.

DISCUSSION: The key management of food allergy is allergen avoidance informed by accurate allergy diagnosis. Inadvertent exposure to food triggers unfortunately does occur and patients need to be confident in prompt self management. Adrenaline must be given for all potentially life threatening food allergy reactions. Anaphylaxis action plans and optimal asthma control are also critical management objectives.

Reading 5 - PEANUT ALLERGY

Burks AW. Peanut allergy. Lancet. 2008 May 3;371(9623):1538-46.

URL: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(08\)60659-5/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)60659-5/fulltext) (payment required)

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ABSTRACT

Peanut allergy has become a major health concern worldwide, especially in developed countries. However, the reasons for this increasing prevalence over the past several decades are not well understood. Because of the potentially severe health consequences of peanut allergy, those suspected of having had an allergic reaction to peanuts deserve a thorough evaluation. All patients with peanut allergy should be given an emergency management plan, as well as epinephrine and antihistamines to have on hand at all times. Patients and families should be taught to recognise early allergic reactions to peanuts and how to implement appropriate peanut-avoidance strategies. It is imperative that severe, or potentially severe, reactions be treated promptly with intramuscular epinephrine and oral antihistamines. Patients who have had such a reaction should be kept under observation in a hospital emergency department or equivalent for up to 4 h because of the possible development of the late-phase allergic response. This Seminar looks at the changing epidemiology of this allergy--and theories as to the rise in prevalence, diagnosis, and management of the allergy, and potential new treatments and prevention strategies under development

Reading 6 - ALLERGY TESTING IN CHILDREN

Robinson M, Smart J. Allergy testing and referral in children. Aust Fam Physician. 2008 Apr;37(4):210-13.

URL: <http://www.racgp.org.au/afp/200804/200804robinson.pdf> (free full text)

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ABSTRACT

BACKGROUND: Allergic diseases (asthma, atopic dermatitis, allergic rhinitis and food allergy) are the commonest chronic diseases of childhood. General practitioners commonly encounter children with allergic diseases and need to be aware of when referral to a paediatric allergist should be considered. An understanding of what diagnostic tests the allergist may use in confirming the diagnosis is also necessary.

OBJECTIVE: This article discusses the criteria for referral to a specialist paediatric allergist and also details the tests that may be used by the allergist as part of the diagnostic work up.

DISCUSSION: Management of allergic diseases requires accurate diagnosis and avoidance of offending allergens where possible. The diagnosis of an IgE mediated allergy requires both a history of symptoms on exposure to the allergen and detection of allergen specific IgE. The most commonly employed diagnostic methods in clinical allergy assessment are skin prick testing, RAST and clinical oral food challenge procedures. The use of alternative or unorthodox tests may provide misleading results and delay correct diagnosis and therefore should not be used.

Reading 7 - ALLERGY DIAGNOSTIC TESTING

Cox L, Hamilton R, Golden D et al. Pearls and pitfalls of allergy diagnostic testing: report from the American College of Allergy, Asthma and Immunology/American Academy of Allergy, Asthma and Immunology Specific IgE Test Task Force. Ann Allergy Asthma Immunol. 2008 Dec;101(6):580-92.

URL: <http://docserver.ingentaconnect.com /deliver/connect/acaai/10811206/v101n6/s3.pdf> (free full text)

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ABSTRACT

The intended purpose of this monograph is to provide a general overview of allergy diagnostics for health care professionals who care for patients with allergic disease. For a more comprehensive review of allergy diagnostic testing, readers can refer to the Allergy Diagnostic Practice Parameters. A key message is that a positive allergy test result (skin or blood) indicates only the presence of allergen specific IgE (called sensitization). It does not necessarily mean clinical allergy (i.e., allergic symptoms with exposure). It is important for this reason that the allergy evaluation be based on the patient's history and directed by a health care professional with sufficient understanding of allergy diagnostic testing to use the information obtained from his/her evaluation of the patient to determine (1) what allergy diagnostic tests to order, (2) how to interpret the allergy diagnostic test results, and (3) how to use the information obtained from the allergy evaluation to develop an appropriate therapeutic treatment plan.

Reading 8 - ALLERGIC RHINITIS

Hu W, Katelaris CH, Kemp AS. Allergic rhinitis - practical management strategies. Aust Fam Physician. 2008 Apr;37(4):214-20.

URL: <http://www.racgp.org.au/afp/200804/200804hu.pdf> (free full text)

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ABSTRACT

BACKGROUND: Allergic rhinitis is a common condition associated with significant effects on quality of life. Readily available treatments can improve outcomes in rhinitis as well as associated allergic diseases such as asthma. Yet allergic rhinitis remains under diagnosed and undertreated.

OBJECTIVE: This article outlines practical strategies and evidence based management of allergic rhinitis.

DISCUSSION: Allergic and nonallergic rhinitis often co-exist. Thorough history of allergen exposure and its relationship to symptoms is vital for the ordering and interpretation of investigations and for management decisions. Some allergen avoidance measures may be ineffective and may cause an unnecessary burden. Demonstrated effective strategies are patient education, intranasal steroids and immunotherapy ('desensitisation'). General practitioners play a vital role in all three strategies, and in supporting patients and families to self manage what is often a chronic condition.

Reading 9 - MANAGEMENT OF ANAPHYLAXIS

Kemp AS, Hu W. New action plans for the management of anaphylaxis. Aust Fam Physician. 2009 Jan-Feb;38(1-2):31-5.

URL: <http://www.racgp.org.au/afp/200901/30042> (free full text)

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ABSTRACT

The Australasian Society for Clinical Immunology and Allergy has developed new anaphylaxis action plans intended for use across Australasia. These educational tools aim to give patients and carers easily accessible information about key steps in the emergency treatment of acute allergic reactions and anaphylaxis. This article outlines the rationale for these plans, introduces two new action plans and key practice points to consider when providing these plans. Action plans are primarily an educational tool for patients considered to be at risk of anaphylaxis. They also function in a similar fashion to a doctor's letter, providing written information that patients and parents can give to child care centres, schools and employers to assist in the provision of appropriate care.

Reading 10 - ALLERGY PREVENTION

Tang ML, Robinson M. Allergy prevention - Current recommendations and new insights. Aust Fam Physician. 2008 Apr;37(4):204-8.

URL: <http://www.racgp.org.au/afp/200804/200804tang.pdf> (free full text)

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ABSTRACT

BACKGROUND: The prevalence of allergic disease has increased considerably in recent decades and Australia has one of the highest rates of allergic disease in the world. As there is currently no cure for allergic diseases, prevention offers a logical approach to addressing the rising burden of disease. The factors responsible for this escalation in prevalence remain unclear, and strategies for allergy prevention remain limited.

OBJECTIVE: This article discusses current recommendations for allergy prevention and highlights new insights into allergic disease.

DISCUSSION: History of allergic disease in a first degree relative is currently the only useful indicator for increased risk of developing allergic disease in a child. Prevention strategies should be directed to these high risk individuals. Currently, maternal dietary restriction during pregnancy or lactation and aeroallergen avoidance are not recommended. Breastfeeding is recommended, and where not possible or insufficient, a partially hydrolysed formula should be used in high risk infants. Introduction of solids should be delayed to 4-6 months of age. There is no evidence that delaying solids beyond this age is of benefit. There is currently insufficient evidence to recommend the addition of probiotics for allergy prevention.
