



# Therapeutics Today

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**How to manage peanut allergy.** Food allergy is the leading cause of anaphylaxis seen in emergency departments in Europe and the USA, causing 30,000 reactions, 2,000 hospital admissions and 200 deaths annually in the USA. Peanut allergy (PA), an IgE-mediated disease affects 1% of children <5 years old and its prevalence is on the increase. The management of PA was recently reviewed (*The Lancet 2008; 371:1538-46*). The **clinical symptoms** develop within seconds and up to 2 hours after ingestion of even a

few milligrams of peanut protein. Symptoms include acute urticaria, angioedema and pruritic erythematous rash (skin), laryngeal oedema, repetitive coughing, and wheezing (respiratory tract) and vomiting, abdominal pain and diarrhoea (GI tract). The mean age of diagnosis in children is 14 months, with symptoms occurring after the first known peanut ingestion in 75% of those eating peanut protein for the first time. **Almost all initial reactions involve the skin**, 50% the respiratory tract and 33% the GI tract. Anaphylaxis includes any of the above symptoms in addition to hypotension and dysrhythmia. A **secondary late-phase allergic response** may occur in 1/3 patients up to 4 hours after they appear to recover from initial symptoms. This may result in fatal or near fatal anaphylactic reactions, and is harder to treat. Individuals who have life threatening / fatal reactions, (generally not seen with first ingestion) usually are older (adolescents or adults) have asthma and a family history of atopy. In general, **the peanut must be eaten to trigger life-threatening symptoms.**

**Management:** Patients and their families require education on the avoidance of accidental peanut ingestion and the management of the early stages of an IgE-mediated reaction. They should be educated to read all food labels thoroughly and patients should consider wearing an allergy bracelet or necklace. A **written management plan** should be drawn up, including information on self-medication and when to seek urgent medical help. Patients with known PA with any generalised skin symptoms, significant gastrointestinal symptoms, or lower respiratory symptoms require **self-injectable epinephrine (adrenaline)**, and an **antihistamine** (e.g. chlorphenamine) and should go to the nearest medical facility. Patients require observation for up to 4 hours in case of a biphasic allergic response. Patients with acute anaphylactic symptoms should be treated aggressively with intramuscular epinephrine, H1-receptor and H2-receptor (not authorised) antagonists, oxygen, inhaled beta-2 agonists and systemic corticosteroids. Patients are usually given a 3-day course of oral prednisolone in addition to an antihistamine following an acute reaction, even though the evidence base is lacking.

**Follow-up:** Studies suggest that 20% of young infants with allergic reactions to peanuts will outgrow their allergy, especially if low IgE antibodies are found on testing. The authors note that novel immunotherapeutic strategies are currently under investigation as potential treatments for PA in the future.



**The NMIC needs you - LAST CHANCE!!!** We wish to thank all those GPs who returned the anonymous questionnaire on the NMIC bulletins and newsletters. We are keen to get as many responses as possible and have extended the feedback date to 30<sup>th</sup> June. If you have mislaid your questionnaire and would like to send feedback, just e-mail [nmic@stjames.ie](mailto:nmic@stjames.ie) and we will send you out

another one, or download one from our website [www.nmic.ie](http://www.nmic.ie). Don't forget, overall results will be published on our website and will be used to improve our publications.



**Update on Crohn's Disease.** The management of Crohn's disease (CD) which has changed radically over the past decade was recently reviewed (*BMJ 2008; 336: 1062-6*). CD has a median incidence of 6.7 per 100,000 annually, therefore most GP's in the UK only see a new case every 7 years. CD presents at any age although usually between 15-30 years. CD is characterised by transmural intestinal inflammation, and occasional extra-intestinal features including arthropathy or dermatopathy. It is **classified** in terms of the intestinal site affected, the degree of active inflammation and whether it has stenotic or fistula complications.

**Diagnosis:** Presenting symptoms include diarrhoea, abdominal pain, weight loss and fatigue. Prompt referral is indicated for patients with these symptoms in association with iron deficiency or raised inflammatory markers. The diagnosis, which is often delayed, is established through history, endoscopy, histopathology and appropriate radiology.

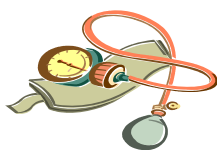
**Treatment:** The goals are to achieve sustained remission with the least toxic therapy and to avoid complications. Management may include both medical and surgical therapy and should be tailored to the individual. **Mesalazine** is little better than placebo for mild or moderately active CD; as maintenance therapy it reduces relapse after surgery but not after medically induced remission. **Corticosteroids (CS)** effectively induce remission but do not prevent relapse. Long-term treatment with CS should be questioned in view of the risk of side-effects. **Antibiotics** are appropriate for septic complications. **Immunomodulators** including azathioprine, mercaptopurine or methotrexate help to maintain remission and are increasingly considered early on in the disease (especially in those with aggressive disease). One meta-analysis estimated that azathioprine is twice as likely as placebo to maintain remission. **Biological therapies** including infliximab and adalimumab, block the action of tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) (which mediates inflammation in CD) and produces response rates of up to 80%, however steroid-free remission rates are lower. They are administered parenterally and persist in the body for many weeks. Indications for TNF- $\alpha$  inhibitor therapy include induction of response, remission, and maintenance of patients with severe CD in spite of therapy with CS and/or immunomodulators. Current guidelines state that the decision to use biological therapy should be based on disease activity, response to previous therapy and external factors.

The **benefits and risks** of any treatment should be discussed with the individual patient. Major adverse effects can occur with azathioprine (including myelosuppression and pancreatitis), however they are tolerated by 75% of patients. The risk of opportunistic infections in inflammatory bowel disease is increasingly recognised, and an increased risk of serious infection with TNF- $\alpha$  inhibitors and steroids has also been seen.

Historically up to 80% of patients with CD undergo **surgery** at some stage, however the rates of surgery may already be decreasing. Laparoscopic resection is becoming the standard of care. The authors note that new treatment options for CD are evolving with the development of new biological therapies, however the logistics of care (direct access to a multidisciplinary team) are as important as pharmacotherapy to enable patients manage their life with CD.



**New guideline on Asthma.** The British Thoracic Society, in association with the Scottish Intercollegiate Guidelines Network (SIGN), has recently published (May 2008) its updated guideline on the diagnosis and management of asthma. Check out <http://www.brit-thoracic.org.uk/> or [www.sign.ac.uk](http://www.sign.ac.uk) to get the full guidance document or a shortened Quick Reference Guide with helpful step-by-step diagrams.



**Treating high blood pressure is beneficial in patients aged 80 years and older.** With reference to this abstract, which appeared in last month's Therapeutics Today (Number 5 May 2008), we wish to state that perindopril (2 & 4mg) in combination with indapamide are authorised in Ireland for essential hypertension.