



## When to Introduce Highly Allergenic Foods

1.

**Which foods should be avoided in young children due to allergy concerns (e.g., strawberries, peanut butter)? Why? And when can they be introduced?**

Question submitted by:  
**Anonymous**

Nine foods are responsible for the majority of allergic reactions in the North American population. These are peanuts, tree nuts, fish, shellfish, wheat, soy, milk, egg and sesame. These foods account for > 90% of all allergic reactions to foods. Reactions to peanuts, tree nuts and shellfish are responsible for most cases of fatal anaphylaxis to foods. In recognizing that these nine foods are responsible for most food-related allergic reactions, various national pediatric societies have developed guidelines for parents, recommending ages at which to introduce highly allergenic foods. However, in January 2008, the American Academy of Pediatrics undertook a lengthy, detailed review of the published data which has served as the basis for recommending the delayed introduction of highly allergenic

foods. This review<sup>1</sup> stated that there was "no current convincing evidence that delaying their introduction beyond the age of four to six months has a significant protective effect on the development of atopic disease." The authors of this review have not yet revised the recommendations *vis-a-vis* timing of introduction of highly allergenic foods, but have now set the stage for new recommendations.

### Reference

1. Greer FR, Sicherer SH, Burks AW: Effects of Early Nutritional Interventions on the Development of Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction, Breastfeeding, Timing of Introduction of Complementary Foods, and Hydrolyzed Formulas. *Pediatrics* 2008; 121(1):183-91.

Answered by:  
**Dr. Peter Vadas**

## Criteria for Rituximab

2.

**What criteria should be used on starting rituximab in non-Hodgkins lymphoma?**

Question submitted by:  
**Anonymous**

In most of Canada, rituximab is used in the treatment of CD20-positive, mature B-cell lymphomas. These include follicular lymphoma, diffuse large B-cell lymphoma, mantle cell lymphoma and Burkitt's lymphoma. As a primary treatment, rituximab is used in combination with other chemotherapeutic, cytotoxic agents. Rituximab usage is

often governed by funding and its usage tends to vary somewhat across Canada.

Answered by:  
**Dr. Kamilia Rizkalla and  
Dr. Kang Howson-Jan**



## ECGs to Help Detect Left Ventricular Hypertrophy

3.

### Should patients with hypertension have an annual ECG to help detect left ventricular hypertrophy (LVH)?

Question submitted by:  
**Dr. Nicolas Thibault**  
Calgary, Alberta

Echocardiography is the procedure of choice in assessing LVH, since the sensitivity of the different ECG criteria may be as low as 7% to 35% with mild LVH and only 10% to 50% with moderate to severe disease. The observation that LVH determined by echocardiography is an early sign of end-organ damage that correlates with increased CV risk raises the important question of when this procedure should be performed in hypertensive patients.

It is reasonable to perform an echocardiogram to assess left ventricular mass when the findings will influence treatment, for example:

1. In patients with mild diastolic hypertension (90 mmHg to 94 mmHg) who have no other CV risk factor or evidence of end-organ damage (including lack of or equivocal signs of LVH on the ECG).

The presence of LVH detected by echocardiography is generally an indication for medical therapy, while nonpharmacologic modalities alone can be used if left ventricular mass is normal

2. In patients who have no evidence of end-organ damage, who have either severe or refractory hypertension or hypertension that is present in the doctor's office but not at home or work. The absence of LVH in this setting suggests either hypertension of recent onset or white coat hypertension. The presence of the latter can be confirmed by ambulatory BP monitoring

Answered by:

**Dr. Chi-Ming Chow**

*It is reasonable to perform an echocardiogram to assess left ventricular mass when the findings will influence treatment.*



## Treating Ramsay Hunt Syndrome

4.

### How is Ramsay Hunt syndrome (RHS) treated?

Question submitted by:

**Dr. Gilbert Cyr**  
*Degelis, Quebec*

RHS is also known as herpes zoster oticus. It is caused by herpetic involvement of the facial (geniculate), vestibulocochlear, or trigeminal ganglia. The infection causes pain and eventually vesicular eruption of the auricle and/or external ear canal. Facial palsy, hearing loss, tinnitus and persistent vertigo may also occur.

Prompt initiation of oral steroids and acyclovir should begin when this happens. This therapy will decrease vertigo, lessen the incidence of post-herpetic neuralgia and improve recovery of facial nerve function. Hearing loss does not seem to respond as well to this treatment. Pain-relieving

medications and eye protection should also always be considered.

For patients who develop post-herpetic neuralgia, treatment is available to reduce pain and maintain quality of life. Treatment generally begins with a low-dose tricyclic antidepressant and may also include narcotic medications, anticonvulsants and/or steroid injections.

Answered by:

**Dr. Ted Tewfik and**  
**Dr. Hasan Alshemari**

## How to Treat a Short Frenulum

5.

### In a healthy, normally developing 10-month-old, is there any treatment required for a short frenulum (tongue tie)?

Question submitted by:

**Dr. Katherine J. M. Abel**  
*Leduc, Alberta*

If the child is developing normally, no therapy is needed for an otherwise healthy 10-month-old with a short frenulum. While clipping the frenulum is not difficult, no one ever had an adverse event to a procedure that was not performed. The majority of children with a short frenulum do not experience difficulty with it and will grow out of it. In the case

of children who are having difficulty breastfeeding or with articulation, consideration may need to be made for clipping the frenulum, but as noted this is likely to be infrequent.

Answered by:

**Dr. Micheal Rieder**

Susceptibility to Colds

6.

**Why do some people get more colds than others, even in the same family with the same exposure to viruses?**

Question submitted by:

**Dr. Pipper Hawley**

**North Vancouver, British Columbia**

There are numerous possible explanations for this. One is simply related to hygiene. Some people are more likely to touch their nose or other mucosa with contaminated hands, or less likely to wash their hands. Some simply have more hand-to-hand contact with the nasal secretions of viral “donors,” or more exposure to infectious aerosols. Some donors have a higher viral concentration in their secretions, or more virus on their hands than others. Some people have more symptoms during an infection due to underlying comorbidities such as sinusitis, allergies, or non-infectious rhinitis. Some are more susceptible to infection secondary to mucosal defense damage, such as from smoking or other respiratory illnesses. Partial immunity is built up with repeated exposure and the frequency of infections decreases with age (with the exception of adults with young children). Finally, there are likely to be some subtle immunologic variations among people, leading either to greater susceptibility to infection or, on the contrary, a more vigorous inflammatory response to the virus which then causes more intense symptoms.

Answered by:

**Dr. Micheal Libman**



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## Pain Relief for Fibromyalgia

7.

**Please comment on the mechanism of pain relief when using pregabalin for fibromyalgia.**

Question submitted by:  
**Dr. Jacqueline Mitchell**  
Brampton, Ontario

The pathophysiology of fibromyalgia is incompletely understood. There is evidence that fibromyalgia is associated with aberrant pain processing within the central nervous system. Patients with fibromyalgia often describe hyperalgesia and allodynia, which may reflect central sensitization to pain.

Pregabalin is an  $\alpha$ -2-delta ligand that has analgesic and anticonvulsant activities in animal models. This effect is likely mediated through decreased release of near a chemical, including glutamate, noradrenaline and substance P.

Pregabalin was studied in a placebo-controlled randomized double-blind trial for the treatment of fibromyalgia.<sup>1</sup> This study demonstrated that pregabalin at a dose of 450 mg q.d. was efficacious in the treatment of

fibromyalgia, reducing symptoms of pain, history sleep and fatigue compared with placebo.

Gabapentin, which has a similar mechanism of action, has also been studied in a randomized double-blind, placebo-controlled study of fibromyalgia<sup>2</sup> and was found to be both safe and efficacious at a dose of 1200 mg to 2400 mg q.d.

### References

1. Crofford LJ, Rowbotham MC, Mease PJ, et al: Pregabalin for the Treatment of Fibromyalgia Syndrome: Results of A Randomized, Double-Blind, Placebo-Controlled Trial. *Arthritis Rheum* 2005; 52(4):1264-73.
2. Arnold LM, Goldenberg DL, Stanford SB, et al: Gabapentin in the Treatment of Fibromyalgia: A Randomized, Double-Blind, Placebo-Controlled, Multicenter Trial. *Arthritis Rheum* 2007; 56(4):1336-44.

Answered by:

**Dr. Elizabeth Hazel**

## Iron Supplementation for Patients with Decreased Ferritin

8.

**Should someone with a normal hemoglobin and decreased ferritin be placed on iron supplementation?**

Question submitted by:  
**Dr. Andrew I. Rajan**  
Windsor, Ontario

Iron replacement for a patient in the absence of anemia should be done with some caution. In older patients, it may unmask underlying polycythemia rubra vera and lead to erythrocytosis if iron replacement is given. In younger individuals, especially those with a history consistent with iron deficiency, low ferritin may be

discovered before the onset of anemia. Iron replacement is advisable in this instance.

Answered by:

**Dr. Kamilia Rizkalla and**  
**Dr. Kang Howson-Jan**

9.

## The Role of $\beta$ -Blockers in the Treatment of Esophageal Varices

### What is the role of $\beta$ -blockers in the treatment of esophageal varices?

Question submitted by:

**Dr. David Hawkins**

**Kelowna, British Columbia**

Variceal hemorrhage occurs in about one-third of patients with cirrhosis. It is a very serious complication of cirrhosis and can be fatal if it occurs. All patients who have cirrhosis should be screened for esophageal varices. Each episode of active variceal hemorrhage is associated with a 30% mortality.<sup>1,2</sup> If varices are identified prior to a variceal bleed, steps can be taken to prevent bleeding. This is referred to as a primary prophylaxis of variceal bleeding.

Nonselective  $\beta$ -blockers lower portal pressure. They are effective at reducing the risk of first bleeding in patients with esophageal varices. Many studies have been conducted on this topic and a meta-analysis of the data suggests that the risk of bleeding is decreased by about 40% and the risk of death is decreased by 20%.<sup>3</sup> As such, they are the treatment of choice for primary prophylaxis. If a patient has a variceal bleed the varices should be treated therapeutically with banding until they are eradicated. These patients are often placed on  $\beta$ -blockers between banding sessions.

#### References

1. Smith JL, Graham DY: Variceal Hemorrhage: A Critical Evaluation of Survival Analysis. *Gastroenterology* 1982; 82(5 Pt 1):968-73.
2. DeDombal FT, Clarke JR, Clamp SE, et al: Prognostic Factors in Upper G.I. Bleeding. *Endoscopy* 1986; 18(Suppl 2):6-10.
3. Hayes PC, Davis JM, Lewis JA, et al: Meta-Analysis of Value of Propranolol in Prevention of Variceal Haemorrhage. *Lancet* 1990; 336(8708):153-6.

Answered by:

**Dr. Jerry McGrath**



**PREVACID** (lansoprazole delayed-release capsules) and **PREVACID FasTAB** (lansoprazole delayed-release tablets) are indicated in the treatment of conditions where a reduction of gastric acid secretion is required, such as: Symptomatic Gastroesophageal Reflux Disease (sGERD); treatment of heartburn and other symptoms associated with GERD.

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## Phosphodiesterase Type 5 Inhibitors

# 10.

**What do you think about the phosphodiesterase type 5 (PDE5) inhibitors?**

Question submitted by:

**Dr. Jean Drovin**  
*Cap-Rouge, Quebec*

The PDE5 inhibitors inhibit the enzyme phosphodiesterase which increases the intracavernosal cyclic guanosine monophosphate levels, thereby increasing blood flow and are effective agents in restoring erectile function. Sildenafil was the first agent available in this class, followed by vardenafil and tadalafil. All are effective in the treatment of erectile dysfunction of various causes, including psychogenic. They appear to be fairly safe and the major side-effects include headaches, lightheadedness, flushing and visual distortion including, rarely, blue vision. Tadalafil has a longer duration of action, up to 36 hours. The absolute contraindication is in men taking nitrates concurrently, severe hypotension and

vasomotor collapse. The PDE5 inhibitors are more effective than the older oral agents such as yohimbine and more acceptable to patients compared with intracavernosal injection of prostaglandin, intra-urethral insertion of prostaglandin, vacuum-assisted erection devices and penile prosthesis. In addition to the use in treating erectile dysfunction, they also have been studied in the treatment of pulmonary hypertension, where they show some promise.

Answered by:

**Dr. Hasnain Khandwala**

## The Cause of Broken Heart Syndrome

# 11.

**Is broken heart syndrome caused only by emotional stress or can it be caused by physical stress as well?**

Question submitted by:

**Dr. Azad S. Guron**  
*Stephenville, Newfoundland*

Stress-induced cardiomyopathy (also called transient left ventricular apical ballooning, broken heart syndrome and, in Japan, takotsubo cardiomyopathy) is an increasingly reported syndrome characterized by transient apical left ventricular dysfunction that mimics MI, but in the absence of significant coronary artery disease. Stress-induced cardiomyopathy is much more common in women than men. The onset of stress-induced cardiomyopathy is typically triggered by an acute medical illness, intense emotional or physical stress (e.g., death

of relatives, particularly if unexpected, domestic abuse, arguments, catastrophic medical diagnoses, devastating financial or gambling losses, natural disasters). Postulated mechanisms include coronary artery spasm, myocarditis and dynamic mid-cavity obstruction related to catecholamine excess.

Answered by:

**Dr. Chi-Ming Chow**

*cme*