Consultant's Corner

Practical Answers To Your Everyday Questions

1. Condyloma concerns

Patients being treated for condyloma often ask when they can safely have sex again with their partner without protection? What guidelines can we offer them?

Question submitted by:
Dr. Richard Germain
Pointe-Claire, Quebec

There is no answer to this question. Patients with condylomata often show the presence of papilloma virus in epithelial cells taken from nearby normal-appearing skin. There is no practical way a patient can be determined to be noncontagious. The role of reinfection in clinical relapses is probably minimal, therapy is usually not curative and treatment will not decrease transmission. Barrier protection is the only preventive measure available.

Answered by:
Dr. Michael Libman

2. Antibiotics affecting IM MPA?

Do antibiotics interfere with medroxyprogesterone acetate efficacy?

Question submitted by:
Dr. Christina Fisher
Toronto, Ontario

Most failures of intramuscular (IM) medroxyprogesterone acetate (MPA) are related to the timing of administration. Approximately 1/300 patients on this medication will become pregnant.

In a study measuring the metabolism of MPA, the results suggest cytochrome P450 3A4 is primarily involved in the metabolism of MPA. The only antibiotic listed is rifampin, which decreases the plasma concentrations of MPA (> 50% reduction in area under the curve).

The challenge is to get the right drug to the patient while minimizing adverse reactions.

IM MPA contains no estrogen and is devoid of estrogenic risks, but is associated with its own complications.

Answered by:
Mr. Joel Lamoure

3. Patients with peanut allergies

What hope lies in the future for patients with peanut allergies? Why don't we offer desensitization?

Question submitted by:
Dr. Thomas E. Maxwell
Hawkesbury, Ontario

Allergy to peanuts tends to be persistent for a long time. It can also be a very severe allergy. Though some patients lose their sensitivity, it requires careful evaluation, as those who lose it can reacquire it.

At the present time, avoidance remains the best solution, but it is an imperfect treatment. Patients must also be able to initiate self-treatment of an acute reaction to deal with inadvertent exposure to the peanut antigen. I suggest a "kit" of chewable or liquid antihistamine and an epinephrine auto-injector. Patients need to be instructed on when to use their drugs and how to use the epinephrine auto-injector.

Immunotherapy has been attempted, but is dangerous and deaths have occurred. Therefore, it is not an option at this time.

New immune-modifying options that can "turn off" the allergic response will soon be available. Their role in management of peanut and other high-grade food allergies is yet to be established. They will likely suffer from two major disadvantages. The first is the route of administration (*i.e.*, injected). The second disadvantage is the significant expense. For widespread use, new treatments will need to be safe, inexpensive and easy to administer.

Answered by:
Dr. W James Fenton

4. Managing severe neutropenia

How should you manage severe neutropenia in an asymptomatic patient when the neutrophil is less than 0.5 x 10^9/L? Do they need hospitalization?

Question submitted by:
Dr. Hany Aeta
Cumberland, Ontario

The management depends on the cause. Whether there is a reversible cause, such as treatment with myelosuppressive medications, or not, will determine how aggressively patients need to be managed. If the patient is afebrile, hospitalization is not recommended because of the prevalence of nosocomial infections. Empiric or prophylactic antibiotic and antifungal therapy should be avoided for fear of selecting a more resistant organism.

On the other hand, such a patient should be counselled to present to the emergency department immediately if their temperature reaches 38.5 C or higher. Temperatures of 38.0 C or higher should also raise concern if it persists for more than one hour, or if the patient has symptoms consistent with an infection.

The febrile neutropenic patient requires empiric broad-spectrum antibiotic therapy without delay after blood cultures have been obtained. The selection of antibiotics will vary depending on the profile of microbes reported in the institution of choice, but should cover Gram-negative organisms, including *Pseudomonas*.

Patients with chronic neutropenia and recurrent infections should be referred for a specialist's opinion. Filgrastim in low doses may be necessary to prevent future infections.

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

5. Celecoxib safety

Is celexocib safe to use for short periods of time at doses of 200 mg/d to 400 mg/d in young, healthy people or in older people who have low cardiac risk?

Question submitted by:
Dr. Rerle Rajaj
Waterloo, Ontario

Celecoxib is a non-steroidal anti-inflammatory drug (NSAID) with predominant cyclo-oxygenase (COX)-2 activity. All NSAIDs, including COX-2s, can have adverse effects upon renal function, blood pressure and fluid status.

The current debate regarding cardiovascular risks for COX-2 agents has now broadened to also include traditional NSAIDs. It is possible that NSAIDs as a whole group may have a small, but definite risk of exacerbating cardiovascular disease. It is also important to remember that the gastrointestinal risk profile for COX-2 agents is markedly better than for traditional agents.

As NSAIDs are mostly used for symptomatic relief of pain and inflammation, the risk benefit ratio should be weighed. There is also no evidence that prolonged use has any impact on the underlying musculoskeletal disease process.

A short course of celecoxib in a young, healthy person or even an older person with low cardiac risk is unlikely to have clinically important cardiovascular consequences. It is, however, prudent to recommend the use of any NSAID in the lowest effective dose for as short a period of time as possible.

Answered by:
Dr. Mary-Ann Fitzcharles

6. Asking about eczema

What is an eczematoid reaction? What causes it on a microscopic/cellular level?

Question submitted by:
Dr. Bill Taylor
Medicine Hat, Alberta

An eczematoid reaction is an inflammatory reaction causing a vesicular dermatitis. It can occur with primary eczemas, such as atopic dermatitis, but we usually reserve the term for secondary eczema changes caused by such processes as infections. For instance, an area of impetigo can irritate the skin or induce an inflammatory response that produces small vesicles. Other processes, such as psoriasis and stasis, can similarly inflame the skin, producing a dermatitis.

On a microscopic level, we see a lymphotic infiltration and spongiosis. What this manifests on the skin is small blisters or vesicles identical to a primary dermatitis. This is why an aggressive diaper rash caused by candida can sometimes have a profound dermatitic or eczematoid component that requires an anti-inflammatory approach to treatment, as well as a specific anti-candida therapy (*i.e.*, adding hydrocortisone, 1%, to clotrimazole cream in treating an aggressive rash caused by yeast).

Answered by:
Dr. Scott Murray

7. PAR-Q clarification

What is a PAR-Q and PAR-X, as mentioned in Dr. Howard Winston's October 2005 article, "Scared to Death of Exercise—Part I"?

Question submitted by:
Dr. D. Newnham
Barrie, Ontario

The PAR-Q is the Physical Activity Readiness-Questionnaire, used to screen patients for any significant medical condition that would exclude him/her from initiating an exercise program. It mostly assesses the cardiovascular and the musculoskeletal systems. As well, it asks about any medications the patient may be taking, since some patients don't believe they have any medical conditions, because their symptoms are controlled by the drugs they take

The PAR-X, or the PARmed-X, acts as a guide in the screening physical medical examination before giving the patient the green light to begin his/her exercise program.

There is also a PARmed-X for pregnancy, but this will be discussed in a later edition of "Time Out."

For the time being, the Canadian Society for Exercise Physiology is an excellent resource for fitness information. These forms are on their Web site (**www.csep.ca**) and can be printed out for future use. You can also contact them at 1-877-651-3755.

Answered by:
Dr. Howard Winston

8. Hypoinsulinemia—what's the DD?

What is the differential diagnosis (DD) of a hypoinsulinemic patient?

Question submitted by:
Dr. Laurie Brooks
Toronto, Ontario

Without knowing the concomitant glucose level, it is difficult to answer the question. If a patient is hypoinsulinemic during hypoglycemia, which is an appropriate response and rules out an insulinoma. Hypoinsulinemia during hyperglycemia would suggest absolute or relative insulin deficiency.

In my opinion, however, except in a situation where a patient is being evaluated for an insulinoma, the measurement of insulin levels seldom proves to be useful and is often difficult to interpret.

Answered by:
Dr. Hasnain Khandwala

9. Vaccines with preservatives

What is your opinion on giving the flu vaccine to infants if it contains the preservative thiomerosal?

Question submitted by:
Dr. P.A. Loveless
Hamilton, Ontario

The preservative thiomerosal is used to prevent contamination of vaccines with bacteria. It contains a small amount of mercury.

There are no reports of any children having an adverse effect associated with mercury preservatives in vaccines. Additionally, a recent National Institute of Health study has demonstrated no difference in blood mercury concentrations between people who have and who have not received a vaccination.

Given the risk of serious complications of influenza, I strongly recommend that infants and children be vaccinated against the flu.

Answered by:
Dr. Michael Rieder

10. Desensitizing allergies?

What is the evidence for allergy desensitization?

Question submitted by:
Dr. Don Pinksen
Guelph, Ontario

Hyposensitization or allergen immunotherapy (AIT) is an effective form of therapy for inhalant allergies to trees, grass, weeds and ragweed pollens, dust mites, animal danders, cockroach allergens and some molds. It is also an extremely effective treatment for anaphylactic sensitivity to venoms of stinging insects, including honey bee, wasp, yellow hornet, white face hornet, yellow jacket and fire ant venoms.

AIT is effective in carefully selected patients with allergic asthma. When using standardized treatment extracts at optimal doses, AIT modifies the allergic response by decreasing mast cell degranulation upon exposure to allergen, increasing titres of blocking immunoglobulin (Ig) G antibody, inducing a T suppressor response, which down-regulates allergen-specific IgE production and decreases cytokine synthesis.

With AIT to inhalant allergens, meta-analyses of many clinical trials show an average 75% reduction in symptoms and a corresponding 75% reduction in the need for medications. Maximal response to AIT is typically seen at 12 to 18 months after starting AIT. The usual duration of immunotherapy is three to five years. For venom immunotherapy, recipients achieve 98% protection against life-threatening reactions following stings. The usual duration of venom immunotherapy is five years.

Answered by:
Dr. Peter Vadas

11. RBBB in an athlete

Does RBBB in an athlete reduce maximum cardiac output?

Question submitted by:
Dr. Steve Sullivan
Victoria, British Columbia

Complete right bundle branch block (RBBB) can be seen in a number of medical conditions that affect the right heart, such as:

- chronic lung disease,
- atrial septal defect,
- Ebstein anomaly,
- acute myocardial infarction,
- cardiomyopathies, *etc.*

However, RBBB may also occur among many healthy individuals with no underlying medical condition or structural heart disease. Without underlying cardiac conditions, the prognosis and survival of individuals with RBBB is not much different from the general population.

There is no relationship found between cardiac output impairment and RBBB in literature. Therefore, isolated RBBB without underlying cardiac conditions does not contraindicate participation in sports.

Answered by:
Dr. Chi-Ming Chow

12. Concerned about malabsorption?

Is malabsorption (*e.g.*, iron, calcium) a concern in prolonged treatment with PPIs?

Question submitted by:
Dr. Juan Antonio Garcia
Calgary, Alberta

Although there is a physiologic rationale for malabsorption of nutrients and micronutrients with the prolonged use of proton pump inhibitors (PPI), clinically significant occurrences have not been observed. The only possible exception relates to serum vitamin B12 concentrations, which appear to be numerically lower in long-term PPI users. However, the incidence of clinically relevant vitamin B12 deficiency does not appear to be increased.

Routine screening of long-term PPI users for B12 deficiency is unnecessary, although it seems prudent to consider this diagnosis in such patients with compatible symptoms.

Answered by:
Dr. Mark Borgaonkar

13. Antipsychotics in pregnancy—are they safe?

What is the evidence for the safety of using antipsychotics in pregnancy?

Question submitted by:
Dr. Mark Lander
Winnipeg, Manitoba

In general, the use of antipsychotic medication during pregnancy is indicated when risk to the fetus from drug exposure is outweighed by the risks of untreated psychiatric illness in the mother, particularly in the context of psychosis.

The body of evidence, including a recent review,[1] suggests that the atypical antipsychotics do not appear to be associated with an increased risk of major malformations. However, a few studies report an increased hyperglycemic risk for pregnant women related to atypical antipsychotic therapy during pregnancy.

Because of the greater data with respect to conventional antipsychotics, some specialists have suggested the use of high- and mid-potency conventionals as an alternative to atypicals. Thus, the most relevant parameters for drug selection should be based upon evaluation of the risk/benefit ratio of fetal and neonatal drug exposure, the degree of severity and the stability of maternal psychiatric illness and the safety/efficacy profile of the drug in question.

Answered by:
Dr. Pierre Chue

References
1. McKenna K, Koren G, Tetelbaum M, et al: Pregnancy outcome of women using atypical antipsychotics: A perspective comparative study. J Clin Psych 2005; 66(4):444-9.

14. Anemia in the elderly

Why is it so difficult to find a specific cause of anemia in the elderly? How far should investigations go?

Question submitted by:
Dr. H.W. Sacks
Edmonton, Alberta

The likely explanations are:

1. The presence of concurrent or underlying illnesses, possibly undiagnosed, causing anemia of chronic disease.
2. The greater likelihood of having bone marrow disease, such as myelodysplastic syndrome or infiltration by malignancy.

The types or extent of investigations depend on the type of anemia—microcytic, normocytic or macrocytic. In community general practice, I would recommend the following list as a basic menu of investigations to select from:

- Microcytic: Serum ferritin, and/or hemoglobin electrophoresis (only if the patient belongs to an ethnic group with a higer prevalence of thalassemias).

- Normocytic: Reticulocyte count, immunoglobulin G, A and M, and serum protein electrophoresis. If the retic count is increased, investigations looking for a source of blood loss need to be started. If the retic count is not increased, anemia of chronic disease or a bone marrow disease becomes the likeliest explanation. Significantly increased bilirubin may indicate the presence of hemolysis. The latter two tests are to look specifically for multiple myeloma and can be done later if the initial investigations do not provide a clear answer.

- Macrocytic: Serum vitamin B12, folic acid levels and liver enzymes. A good history of alcohol ingestion, and a repeat complete blood cell count after being alcohol-free for six to eight weeks can be helpful. Reticulocytosis can lead to an increased mean cell volume as well, in which case, searching for blood loss would again be the key. All the other differential diagnoses, such as myelodysplasia, would likely require bone marrow examination.

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

15. Facing Jessner's lymphocytic infiltrate

What is the face rash, Jessner's lymphocytic infiltrate?

Question submitted by:
Dr. Charles Lynde
Toronto, Ontario

This is a rather uncommon condition of red infiltrated plaques on the face, neck or, sometimes, chest. They are non-scaley and usually asymtomatic. Lasting months to years, these plaques often resolve on their own. They appear much like variants of discoid lupus and polymorphous light eruption, but histology samples will differentiate them. The presence of scale and follicular scaling ("tacking") is more often seen in the more common discoid lupus. In some patients, the lesions can worsen with sun exposure.

Treatment can include topical and oral steroids and antimilarials.

Answered by:
Dr. Scott Murray

16. Handling labyrinthitis

What is the best way to manage labyrinthitis?

Question submitted by:
Dr. W. Porten
Vancouver, British Columbia

Labyrinthitis is an inflammatory disorder of the inner ear or labyrinth. Clinically, this condition produces disturbances of balance and hearing to varying degrees and may affect one or both ears. Bacteria or viruses can cause acute inflammation of the labyrinth in conjunction with either local or systemic infection. Viral labyrinthitis is the most common form of labyrinthitis observed in clinical practice.

The initial treatment for viral labyrinthitis consists of bed rest and hydration. Diazepam is occasionally helpful as a vestibular suppressant. A short course of oral corticosteroids may be helpful. Currently, the role of antiviral therapy is not established.

Answered by:
Dr. Ted Tewfik

17. Raised PTH—blaming supplements?

How should I approach a very slightly raised PTH in a woman who takes additional calcium supplements?

Question submitted by:
Dr. B. Toews
Coquitlam, British Columbia

Calcium and/or vitamin D supplements taken in non-pharmacologic doses should not have any significant effects on serum calcium and/or parathyroid hormone (PTH) levels.

In this particular patient, assuming that her serum calcium level is normal, the elevated PTH level suggests secondary hyperparathyroidism. The patient should be worked-up for causes of secondary hyperparathyroidism (renal insufficiency, vitamin D deficiency, gastrointestinal malabsorption, celiac disease, liver disease, hypercalciuria, *etc.*). If these are normal, the elevated PTH and normal calcium level could be due to normocalcemic primary hyperparathyroidism.

Answered by:
Dr. Hasnain Khandwala

18. Arcus senilis and lipid levels

Is arcus senilis always associated with elevated lipid levels? For those with dyslipidemia, does it disappear with treatment?

Question submitted by:
Dr. T.K. Tam
Toronto, Ontario

No. Corneal arcus occurs in normal individuals (< 10% below age 50, rising to 75% by age 70), as well as those with familial and idiopathic dyslipidemia. The whitish ring is separated by a clear zone of up to 1 mm from the corneo-scleral limbus, which distinguishes it from other corneal opacifications. It consists of extracellular cholesterol, cholesterol esters, phospholipids and triglycerides.

Corneal arcus in patients under age 50 should be investigated. There is an increase in cardiac morbidity in this group, even if they have normal lipids; and there is a greatly increased risk if they have dyslipidemia. Other studies with large cohorts have been largely inconclusive.

In those with dyslipidemia, arcus senilis doesn't usually disappear with treatment. Statins can prevent the lipid deposition, but they do not remove existing corneal arcus. Probucol could theoretically decrease arcus, but I have not observed this, nor can I find any references to support this.

Answered by:
Dr. Malcolm Banks

19. Can we still use penicillin?

Can we still treat strep pharyngitis and scarlet fever empirically with penicillin? How significant is the penicillin-resistant streptococcus problem?

Question submitted by:
Dr. B. Toews
Coquitlam, British Columbia

Group A beta-hemolytic Streptococcus (*S. pyogenes*), the major cause of streptococcal pharyngitis and scarlet fever, has never been shown to be resistant to penicillin *in vitro*. There is no convincing evidence that newer agents with activity against *S. pyogenes* provide a better clinical outcome. Some complications of streptococcal pharyngitis, such as peritonsillar abscess, may require broader coverage, especially of anaerobes. *S. pneumoniae* may be resistant to penicillin, although resistance to amoxicillin is rare in Canada.

Answered by:
Dr. Michael Libman

20. Episodic AF—what's the T_x?

What is a good treatment for episodic atrial fibrillation in a person who is otherwise well, but slightly symptomatic?

Question submitted by:
Dr. Ronald H. Estley
Sechelt, British Columbia

The term paroxysmal atrial fibrillation (PAF) is used to describe a patient who has episodic AF. The AFFIRM study stressed:[1]

1. There is no survival advantage between rhythm versus rate control strategies.
2. Oral anticoagulation should be continued among patients with PAF who are at a high risk of stroke.

In this patient, an AV nodal blocker, such as a beta-blocker or diltiazem, should be used for rate control. If there are any high risk factors or more than one moderate risk factor, oral anticoagulation with warfarin to achieve an international normalized ratio between two to three should be considered.

The high risk factors for stroke among patient with PAF include:

- age older than 75 years,
- history of stroke or transient ischemic attack,
- hypertension,
- left ventricular dysfunction,
- mitral stenosis or
- prosthetic heart valve.

Moderate risk factors for stroke include:

- age between 65 to 75 years,
- diabetes and
- a history of coronary artery disease without left ventricular dysfunction.

Low-risk patients may receive acetylsalicylic acid (81 mg to 325 mg) daily.

Answered by:
Dr. Chi-Ming Chow

References
1. The AFFIRM Investigators. Survival in patients presenting with atrial fibrillation in the Atrial Fibrillation Follow-up Investigation of Rhythm Management (AFFIRM) Study. N Engl J Med 2002; 347:1825-33.

Low-risk patients may receive acetylsalicylic acid (81 mg to 325 mg) daily.