Consultant's Corner

Practical Answers To Your Everyday Questions

Editor's Picks "Best of 2011"

Treating Sexual Dysfunction in Risperidone Patients

1. What are the options for treating sexual dysfunction in a 40-year-old male on long term Risperidone with secondary elevation of prolactin?

Question submitted by:
Dr. Paul Provencal
Ste-Anne-de-Bellevue, Québec

Antipsychotic agents can often lead to hyperprolactinemia because of their anti-dopaminergic activity. In return, the elevated prolactin can lead to a state of secondary hypogonadism. There are various options to consider in this scenario. The antipsychotic agent may be discontinued if clinically appropriate. If not, the patient could be switched to the newer atypical antipsychotic agents, which do not cause significant hyperprolactinemia. Generally, treating hyperprolactinemia caused by antipsychotics with dopamine agonist agents, such as bromocriptine is not typically recommended, as dopamine agonists can potentially exacerbate the underlying psychotic condition. Testosterone supplementation is certainly an option. Though it will not normalize the prolactin level, it should improve the sexual dysfunction caused by the hyperprolactinemia induced hypogonadism.

Answered by:
Dr. Hasnain Khandwala

Family History and Breast Cancer Screening

2. At what age should a woman with a family history of breast cancer start mammographic screening?

Question submitted by:
Dr. Daniel Berendt
Edmonton, Alberta

A woman with a family history of breast cancer in a first degree relative should start annual mammography screening ten years before the age of diagnosis of this relative. For example, if the relative had breast cancer at 45-years-old, screening should start at 35-years-old. If there is a genetic predisposition for breast cancer in the family, such as BRCA1 or BRCA2, and the woman is a carrier or otherwise identified as having a high risk of a genetic mutation, then MRI is also used in conjunction with mammography. Breast MRI is not a screening test for the general population.

Answered by:
Dr. Cathy Popadiuk

High Dose Vitamin B12 vs. Injected B12

3. Can high dose oral vitamin B12 replace injected B12?

Question submitted by:
Robert Dickson,
Hamilton, Ontario

The short answer is no. However, it is important to know the mechanisms of vitamin B12 absorption and the evidence for use of these two routes of therapy. Typically, absorption of vitamin B12 (cobalamin) requires a series of steps, including the binding of intrinsic factor leading to the complex of cobalamin with intrinsic factor binding to a receptor on the terminal ileum. However, a very small (yet potentially useful) amount of cobalamin (1%) is absorbed by simple diffusion across the entire intestinal tract without the need for intrinsic factor. Thus, at pharmacologic doses of oral vitamin B12, there will be some amount of cobalamin absorption even in the absence of an intrinsic factor.

There is limited evidence to inform whether or not high dose oral vitamin B12 is as effective as intramuscular injections. Two small prospective, randomized, controlled trials have been conducted comparing these two modalities, and surprisingly, two meta-analyses on these two trials have been published. The conclusions in these meta-analyses demonstrate that high-dose oral vitamin B12 could be as effective as intramuscular vitamin B12. However, the conclusions are based on a limited number of participants in each trial, relatively short follow-up periods, and primarily the response to the use of serum vitamin B12 levels. Serum vitamin B12 levels measure the total amount of cobalamin bound to different proteins, namely transcobalamin I, II, and III. Only vitamin B12 bound to transcobalamin II is physiologically active and may not be reflected in the total serum vitamin B12 levels. Further, in the studies, there is no clear indication of whether certain patients, such as those with pernicious anemia, were less likely to respond to oral supplementation. Given the available evidence, we would recommend that either oral or intramuscular vitamin B12 be used initially for proven clinical vitamin B12 deficiency. If oral vitamin B12 is used initially and there is a lack of response (based on hemoglobin and neurologic response) after four to six months, then a switch to intramuscular vitamin B12 should be considered. Consider an initial parenteral dose in patients with neurological signs and symptoms of B12 deficiency. It is also interesting to note that many patients report increased energy after parenteral B12 administration, even in the absence of B12 deficiency. I have not yet noted very many patients reporting this with oral B12 replacement.

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Answered by:
Dr. Cyrus Hsia and
Dr. Kang Howson-Jan

Treatment for "Airplane Ear"

4.

How can you treat "airplane ear" that does not respond to pseudoephedrine?

Question submitted by:
Dr. R. E. Fredrickson
Halifax, Nova Scotia

The condition is usually due to Eustachian tube dysfunction. The physiologic functions of the Eustachian are as follows:

- Ventilation or pressure regulation of the middle ear
- Protection of the middle ear from nasopharyngeal secretions and sound pressures
- Clearance or drainage of middle ear secretions into the nasopharynx

The patient is advised to use steroid and anti-histamine nasal spray before flying. Popping of the ears is also suggested. This is done by pinching the nose and blowing gently. Popping the ears in this manner, especially after the use of nasal spray, helps to squeeze some of the medication into the Eustachian tube. For young children who have trouble popping their ears, there are some devices that can be purchased over-the-counter (Otovent balloon) that are quite useful. During flight descent, chewing gum may also be helpful for mild cases.

Occasionally, systemic steroids are prescribed. The placement of a tympanostomy tube (pressure equalizing tube) in the eardrum is rarely required to resolve the symptoms. If a patient has allergies or sinusitis, these need to be addressed before flying.

One should be aware of other causes of ear fullness. They include sensorineural hearing loss, serous otitis media, Ménière's disease, tympanic membrane perforation, in a Temporo-mandibular joint (TMJ) problems.

Answered by:
Dr. Ted Tewfik

Treatment of Mildly Elevated Thyroid-stimulating Hormone

5.

Do we treat mildly elevated Thyroid-stimulating hormone (TSH) if a patient is asymptomatic? What is the follow-up?

Question submitted by:
Dr. Izabella Klosowski
St-Bruno, Québec

An elevated thyroid-stimulating hormone (TSH) in the presence of normal levels of fT4 and fT3 is referred to as subclinical hypothyroidism. In an asymptomatic patient, the risks of mild untreated subclinical hypothyroidism are minimal and the benefits of treatment unclear. In general, if the TSH is less than 10 mU/L, treatment is not considered to be necessary or beneficial. If the TSH is over 10 mU/L, treatment may be associated with improvements in lipid profile and cardiac contractility. If appropriate, follow-up can be ensured. I do not routinely treat asymptomatic patients with subclinical hypothyroidism. The thyroid function tests can be rechecked in 6 to 12 months time, or sooner if the patient becomes symptomatic.

The only exception is if the patient is contemplating pregnancy, in which case subclinical hypothyroidism should be treated. Recent studies have suggested that, particularly in the elderly, an elevated TSH is associated with an overall improved health outcome and increased longevity compared to individuals with normal TSH levels, thus raising further concerns about whether this condition should be treated.

Answered by:
Dr. Hasnain Khandwala

Echocardiogram Frequency Following Aortic Stenosis

6.

How often should an echocardiogram be ordered when following a mild, moderate, or severe aortic stenosis?

Question submitted by:
Dr. Deanna Field
Truro, Nova Scotia

Aortic stenosis (AS) patients who are asymptomatic should be followed clinically and by echocardiogram. The American College of Cardiology/American Heart Association (ACC/AHA) guidelines recommend that asymptomatic AS patients have serial echocardiographic testing with the following time intervals:

- Severe AS every year
- Moderate AS every two years
- Mild AS every five years

Echocardiograms should also be performed whenever there is an important change in clinical symptoms or findings. Patients with significant AS can present with angina, congestive heart failure, syncope, or presyncope. Symptoms are usually associated with the aortic valve area (AVA) < 0.8 cm^2 and/or transvalvular mean gradient > 50 mmHg. Patients often exhibit symptomatic improvements and an increased chance of survival after aortic valve replacement (AVR).

Answered by:
Dr. Chi-Ming Chow

The New HPV Vaccine

7. Is the new HPV vaccine really safe? There have been reports of severe adverse reactions.

Question submitted by:
Dr. Brian Hadley
Belleville, Ontario

There have, of course, been reports of various severe adverse reactions to the HPV vaccine, including death and syndromes such as Guillain-Barré. In general, causality has not been established in these cases; although, some have had significant play in the popular media. This is a very simple non living vaccine. Essentially, it is just the HPV L1 capsid antigen. It is hard to imagine how some of these severe and complicated events could be pathophysiologically related to the vaccine, but it is conceivable that some people react badly to one or more epitopes of this protein. Even if some of these severe events are linked to the vaccine, they remain extremely rare, and the vaccine remains among the safest ones we have. At this time, there seems to be little doubt that the HPV vaccine prevents far more death and disability than it might cause.

Answered by:
Dr. Michael Libman

Effectiveness of Medication in Autism Spectrum Disorder

8. How effective is medication in treating autism spectrum disorder?

Question submitted by:
Dr. Len Grbac
Etobicoke, Ontario

First, there are no drugs to treat the fundamental causes of autism spectrum disorder (ASD). This is largely due to the fact that the biological determinants of ASD have yet to be defined (claims to the contrary aside). However, drugs can be used to control some of the behavioural symptoms associated with ASD, and these drugs vary in terms of efficacy against these symptoms. Obsessive-compulsive symptoms in the context of ASD have been treated with serotonin-selective reuptake inhibitors (SSRIs) with variable results. Behavioural problems among children with ASD have been treated with antipsychotic drugs, with side- effects being a major limitation for the use of older antipsychotics. Of the newer antipsychotics, risperidone appears to have the most promise, with good results in more than one study. Children with ASD who are high functioning are sometimes troubled by inattention, which is responsive to methylphenidate. Seizures, which can be a comorbidity of ASD, can be effectively managed using conventional anticonvulsants, such as valproic acid or carbamazepine. Prescription drug use among children with ASD is common, and as many as 70% of children diagnosed with ASD are treated with at least one drug.

In children with ASD, the efficacy and safety of most drugs is not well established, and these children need to be carefully monitored to determine if a drug is producing the desired therapeutic effect, or if it may be producing undesired adverse effects.

Answered by:
Dr. Michael Rieder

Managing Itchy Skin During Pregnancy

9.

How do you manage the problem of itchy skin in pregnant women?

Question submitted by:
Dr. Soheir Atalla
Brossard, Québec

Itchy skin in pregnancy results from hormonal estrogen effects and the physical skin changes associated with stretching. Avoiding situations that dry the skin, such as hot baths and showers, and taking measures to stay cool in hot weather climates can all help prevent the skin from drying out. Applying a gentle moisturizer after bathing, while the skin is moist, may be soothing, as are compounds with aloe vera or calamine lotion. Mild unscented soaps and a warm bath with oatmeal or bicarbonate are also suggested. If the itching is associated with a rash or blistering of the skin, abnormal liver signs, or continues to worsen despite the aforementioned measures, the patient should be referred to an obstetrician to rule out more serious conditions.

Answered by:
Dr. Cathy Popadiuk

Best Agents for Treating Psoriasis of the Scalp

10.

What are the best shampoos for psoriasis of the scalp?

Question submitted by:
Dr. P.I Slowey
Brockville, Ontario

As a general rule, I find therapeutic agents much more effective when applied directly to the scalp and left on (as in gels, pomades, or lotions), rather than quickly washed out. However, there is some benefit to using a salicylic acid shampoo for descaling. Tar shampoos relieve itch quite a bit, and newer steroid-containing shampoos can reduce itching. The common coexistence of seborrhea with psoriasis (sebopsoriasis) may eact well to antiyeast shampoos, such as ciclopirox, ketoconazole, zinc pyrithione, or selenium sulpha shampoos.

Answered by:
Dr. Scott Murray

Accuracy of Rapid Strep Tests in Children

11.

How accurate and useful are rapid strep tests in children?

Question submitted by:
Dr. R. Tennenhouse,
Thornhill, Ontario

Rapid strep tests have been used for some time, but they have been viewed as being somewhat controversial. The main issue with rapid strep tests –which rely on detecting antigens unique to Group A Streptococcus– is their sensitivity. This is a problem that applies to both adults and children. The tests have excellent specificity, which means that a positive test is meaningful, in that there is approximately a 95% chance that the patient does in fact have strep, and thus, therapy would be indicated. On the other hand, if the test is negative, then the issue of specificity raises its head. Most experts would assess rapid strep tests as having specificity in the range of 75 to 85%, which translates into a 15 to 25% chance of a false negative. Therefore, while a positive rapid strep test means the patient should be treated, a negative strep test is in fact not necessarily reassuring, as there is still a reasonable chance that the patient has a strep infection.

Answered by:
Dr. Michael Rieder

Treatment of Thrombosed Hemorrhoids

12.

When do thrombosed hemorrhoids need treatment?

Question submitted by:
Dr. Vincent Luykenar
Coaldale, Alberta

Hemorrhoidal disease is a common entity in clinical practice. Hemorrhoids are a normal part of the human anorectum and arise from connective tissue cushions within the anal canal. The most common presentation is rectal bleeding and pruritus. A patient with a thrombosed external hemorrhoid usually presents with complaints of an acutely painful mass. Pain truly associated with hemorrhoids usually arises only with acute thrombus formation. This pain peaks at 48 to 72 hours. It begins to decline by the fourth day as the thrombus organizes.

The differential diagnosis for acute anal pain includes an intersphincteric abscess or anal fissure. Up to 20% of patients with hemorrhoids will also have an anal fissure.

Acutely thrombosed external hemorrhoids may be safely excised in patients who present within 48 to 72 hours of the onset of symptoms. Infiltration of a local anesthetic is followed by incision and excision of the thrombosed hemorrhoid. Simple incision and clot evacuation is inadequate therapy. In patients presenting after 72 hours, conservative medical therapy is preferable. This consists of sitz baths, a high-fiber diet, adequate fluid intake, stool softeners, topical and systemic analgesics; proper anal hygiene, and in some cases, a short course of topical steroid cream. The prolonged use of topical steroids should be avoided.

Answered by:
Dr. Jerry McGrath

Testosterone Deficiency and Clinical Depression

13.

What role does testosterone deficiency (if any), have in the development of clinical depression?

Question submitted by:
Dr. Katherine Allen
Belleville, Ontario

Men experience changes in their levels of sex hormones beginning at around 40-years of age. By 50-years of age, these changes have definitely begun. There are relative reductions in testosterone, and increases in estrogen compounds present. By 70-years of age, 25% of men meet clinical criterion for hypogonadism, which is secondary to low testosterone. This state has been referred to as Andropause.

There are two studies that look at about 450 patients by Wang and McNicholas, addressing testosterone replacement in elderly or hypogonadal males. These studies found that patients reported improved mood and "well-being" plus reduced fatigue and irritability.

These observations fit in with the clinical picture of depression. According to the Diagnostics and Statistics Manual 4th edition, this is a depressed mood or anhedonia that lasts at least two weeks and is a change from the patient's normal demeanor.[1] It impacts social, work, and personal functioning. It also presents as irritability, fatigue, loss of energy, changes in weight, and potential suicidality.

As such, proper testosterone levels and aberrations in the testosterone levels may play an instrumental part in diagnosing and treating clinical depression in middle-aged to senior males.

Reference
1. Seidman, N: Normative Hypogonadism and Depression: Does "Andropause" Exist http://www.medscape.com/viewarticle/544874. (Accessed November 5, 2010).

Answered by:
Dr. Joel Lamoure

C. Difficile Rate of Colonization

14.

What is the rate of colonization of normal persons with *C. difficile*?

Question submitted by:
Dr. Jane Purvis
Peterborough, Ontario

The problem is in defining "normal" people. Studies have been done on general community populations, demonstrating carriage rates of around 1 or 2%. However, if one screens people without Gastrointestinal (GI) symptoms when entering the hospital, over 8% may test positive for this bacteria in their stool. This latter group is presumably a population that has more underlying disease and perhaps more contact with health care institutions. Some studies show that after taking antibiotics, transient carriage rates may be up to 50%. On the other hand, many healthy people are very resistant to colonization. In studies with a non toxigenic strain, many volunteers failed to become colonized despite ingestion of large quantities of *C. difficile*. Thus, there is no simple answer to this question. Studies looking at household carriers and transmission in the community are ongoing and results should be available soon.

Answered by:
Dr. Michael Libman

Effectiveness of Probiotics for IBS

15. What is the effectiveness of probiotics in irritable bowel syndrome (IBS)?

Question submitted by:
Dr. Ngoc-Lan Nguyen
Montréal, Québec

Several short-term studies of probiotics in irritable bowel syndrome (IBS) have been published, and none have provided clear evidence as to the potential role of probiotic treatment. The probiotic *Bifidobacterium infantis* was significantly more effective than placebo in a controlled trial of 362 patients with IBS.[1] *Lactobacillus GG* or placebo is compared in 25 patients with IBS in a crossover trial.[2] No significant differences were observed in symptom scores for pain, urgency or bloating.

There was, however, a trend toward reduction in the number of unformed stools in patients with diarrhea predominant symptoms. Another study randomized 77 patients with IBS to Lactobacillus salivarius or Bifidobacterium infantis or placebo.[3] Symptoms were significantly improved in the group receiving Bifidobacterium. Lactobacillus plantarum, which was studied in 60 patients with IBS for four weeks.[4] Flatulence was significantly reduced in the probiotic group compared with placebo. There was no difference in abdominal pain.

Better overall gastrointestinal function was maintained at 12 months in the probiotic group compared with placebo, but there was no difference in bloating.

Another study with *Lactobacillus plantarum* and *Bifidocterium breve* compared to placebo found pain and severity scores decreased significantly in the probiotic group after 14 days of treatment.[5]

References
1. Whorwell PJ, Altringer L, Morel J, *et al*: Efficacy of an Encapsulated Probiotic Bifidobacterium Infantis 35624 in Women with Irritable Bowel Syndrome. AJG 2006l; 101(7):1581–90.
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Answered by:
Dr. Jerry McGrath