Consultant's Corner

Practical Answers To Your Everyday Questions

1. Herpes Zoster Vaccine for Canada

Experts are recommending a herpes zoster vaccine. When will it be available in Canada?

Question submitted by:
Dr. Peter A. Loveless
Oakville, Ontario

As many readers will know, this vaccine has now been approved and is being distributed in Canada. The vaccine itself is merely a higher titre preparation of the existing vaccine against chickenpox.

Ironically (except from the commercial point of view), the success of the chickenpox vaccine has resulted in fewer infected children being around to "boost" the immunity of adults. Such boosting is likely important in preventing shingles. So the use of the childhood vaccine increases the need for the adult vaccine. Even though it is approved, having it listed on provincial formularies will be another hurdle. Nevetheless, current recommendations from the American Committee on Immunization Practices and some level of coverage of this vaccine under many American insurance plans, including Medicare, suggest that we may eventually see coverage in at least some provinces. Another hurdle concerns the need to keep the vaccine frozen until use. This requires lab/pharmacy grade freezers, which cost many thousands of dollars and therefore many offices and clinics will not be equipped to supply this vaccine to patients. I would be suspicious of vaccine which has been stored in standard "domestic" freezers.

Answered by:

Dr. Michael Libman

2. Treatments for Keratosis Pilaris

Are there any effective treatments for keratosis pilaris? I have a patient with a severe case on the arms and legs.

Question submitted by:
Dr. Lorna Hruby
Burnaby, British Columbia

There is no dramatically effective treatment for keratosis pilaris. The benefit most patients will see is with sun (UV) exposure. The improvement from this can last a few months but is overall temporary. Of course, the side-effects of this (skin cancer, skin aging) have to be balanced in the advice to patients. Certainly a patient with dysplastic nevi, or pale skin would have to be counselled with this in mind. Some improvement can be noted with moisturizers. The α-hydroxy-or β-hydroxy-based lotions and creams with lactic acid, urea, glycolic and salicylic acid can help a bit.

Topical retinoids are occasionally helpful but can be irritating and an expensive solution with long-term use. I always explain that there is no truly effective therapy but I find the lactic acid lotions the best and safest bet.

Answered by:

Dr. Scott Murray

Anemia in the Elderly

3.

What are some concerns about anemia in the elderly?

Question submitted by:
Dr. Sameh Hassan
Toronto, Ontario

There are a number of concerns with anemia in the elderly pertaining to diagnosis, prognosis and management. The diagnosis of anemia in the elderly is often challenging and may include multiple potential etiologies from dietary intake, increased risk of blood loss and anemia of chronic inflammation (previously called anemia of chronic disease) from various causes. One has to be vigilant of iron, vitamin B12 and folate deficiencies (albeit rare) due to poor intake, malabsorption, or losses. Multiple comorbidities such as underlying malignancies, infections, connective tissue diseases and chronic liver or kidney diseases are just some of the potential inflictions of the elderly that may lead to anemia. Further, medications and alcohol individually or in combination are often contributory causes of anemia. Once a diagnosis of the underlying cause of anemia is made, it is often difficult to determine prognosis and management which can be extremely challenging. Anemia may have profound effects in the elderly with underlying CV or respiratory compromise when left untreated and can be detrimental. Further, other comorbidities can limit treatment options and exacerbate side-effects and toxicities.

Answered by:

Dr. Kang Howson-Jan and Dr. Cyrus Hsia

Listeria Testing

4.

What tests do we do for *Listeria*?

Question submitted by:
Dr. G.B. Molnar
Brampton, Ontario

In general, listeriosis can be divided into two predominant clinical syndromes: gastrointestinal and systemic. GI disease tends to be mild and self-limited in the immunocompetent host. Thus, most diagnostic labs do not have protocols or materials to reliably diagnose this infection from a stool culture, although most public health labs can perform this analysis if needed in an outbreak situation. Similarly, only public health labs would be properly equipped to culture suspected food products, although regular labs could make a reasonable attempt if they are interested. On the other hand, any lab should be able to diagnose systemic infection by culturing blood, cerebrospinal fluid, or other normally sterile body fluid. As a rule, no special techniques are required. Therefore, when invasive infection is suspected, typically in an immunocompromised or pregnant individual, use of these routine cultures is sufficient.

Answered by:

Dr. Michael Libman

Epiglottitis

5. A 13-month-old presents with fever, drooling and refusing liquids. Immunizations are up to date. Is epiglottitis on the differential?

Question submitted by:
Dr. D. Chambers
Banff, Alberta

Epiglottis should always be considered in the differential diagnosis of any toddler with fever, drooling and refusing to drink. However, in the era of immunization, epiglottitis is much less common than other diagnoses leading to this presentation, including abcess and severe viral pharyngitis. While immunization is not universally protective, it is fairly effective and the other causes of drooling and fever need to be considered. Clinical clues that suggest epiglottis include tripod sitting (the child leaning forward on their forearms), high fever and a toxic appearance. In this setting, urgent assessment of the airway by a staff expert in the management of a difficult airway in children is essential.

Answered by:

Dr. Michael Rieder

Huntington's Disease

6. Can you review Huntington's Disease (HD)?

Question submitted by:
Dr. Janna Bentley
Kelowna, British Columbia

HD is a progressive disease presenting with a combination of chorea, behavioural disturbance and dementia transmitted by an autosomal dominant inheritance pattern and was first described by George Huntington in 1872. Most often, the patient presents with twitching or jerking movements, which progress over time. A change in personality, most often depression or paranoid behaviour may be noted by family members. Dementia is a late manifestation of the disease. Neurological examination reveals the chorea that is generalized but may be very subtle in the early stages. Impersistence of sustained movement (tongue protrusion or hand grip) are typical early features. The majority of patients develop symptoms in their fourth or fifth decades. There is no clear sex predominance.

A family history is the most important feature of diagnosis. CT or MRI scans may show atrophy of the caudate nucleus. HD gene was isolated from the short arm of chromosome 4. A reliable blood test can detect the genetic defect and is available through Movement Disorder Clinics across Canada.

There is no definitive treatment for the disease. Symptomatic control of the chorea is achieved by treating with drugs including dopamine agonists (reserpine and tetrabenazine). Psychotic symptoms and depression require standard psychiatric therapy. Perhaps the most important part of treatment is education of the patient and family on the genetic aspects of the disease and the implications for other family members.

Resource

1. Wiggins S, Whyte P, Huggins M et al: The Psychological and Social Consequences Of Predictive Testing for Huntington Disease. Canadian Collaborative Study of Predictive Testing. N Eng J Medicine 1992; 327(20): 1401-1405.

Answered by:

Dr. Ashfaq Shuaib

Headache Red Flags

7.

What are some red flags in headaches? When should we investigate aggressively?

Question submitted by:
Dr. Mark D'Souza
London, Ontario

A number of ominous presenting clinical features in patients with headache should alert the physician to the possibility of structural lesions as the underlying problem. Sudden onset "most severe headache ever," especially in patients with focal neurological symptoms always requires further investigations. Such symptoms include progressive drowsiness, visual disturbances, weakness, ataxia or vertigo. If there is neck stiffness on examination or the patient is difficult to arouse, these are important physical signs that require urgent attention. Medical conditions that present with headaches and neck stiffness include subarachnoid hemorrhage and meningeal infections. Space occupying lesions, including brain tumours, intracranial hemorrhage (epidural or subdural) also often present with a headache. Headache may also be a presenting feature of lesions involving the cervical vertebrae (fracture or dislocation), stroke (cortical venous thrombosis) and inflammatory disorders (temporal arteritis). The headache in such conditions tends to be progressive, more severe in the morning and is often associated with focal signs although they may on occasion be very subtle. As a rule, any new headache, especially if progressive and associated, requires further investigations most commonly a cranial CT or MRI.

Answered by:

Dr. Ashfaq Shuaib

Hermansky-Pudlak Syndrome

8.

In Hermansky-Pudlak syndrome (HPS), how does granulomatous colitis present?

Question submitted by:
Dr. Charles Lynde
Markham, Ontario

HPS is a group of autosomal recessive disorders characterized by oculocutaneous albinism, bleeding diathesis, renal failure, cardiomyopathy and systemic complications associated to lysosomal dysfunction, such as pulmonary fibrosis. Inflammatory bowel disease can be seen in these patients. The clinical features are often suggestive of chronic ulcerative colitis but the pathological features are more closely similar to those of Crohn's disease. Granulomatous colitis is often seen on biopsies obtained endoscopically. The symptoms usually consist of diarrhea, abdominal pain, weight loss and possibly blood in the stool.

Answered by:

Dr. Jerry McGrath

Medicating Pregnant or Nursing Manic-Depressives

9.

What medications should be used in manic-depressive patients who are pregnant or breastfeeding?

Question submitted by:
Dr. Janet Chice
Edmonton, Alberta

This is an excellent question and brings forth the premises of *primum non nocere*, or first do no harm. However, there is a lot of controversy in regards to medications. In one study of 34 women whom self-discontinued psychotropics, 70% reported physical and psychological adverse effects, 30% reported suicidal ideation and 12% were hospitalized.[1] But what is the harm to the patient?

Mood stabilizers with teratogenic effects, for example lithium and valproic acid (affecting the heart and neural tube respectively), in the pregnancy are a concern and in fact contraindicated. The FDA classification must be adhered to and here is where the adequate use of references in an interdisciplinary approach is essential. Being aware if the patient is or will become or planning to be pregnant is also part of the planning. Even using adequate form of contraception can run into interactions that the clinician should be on the watch for *(e.g.*, OCs interacting with lamotrigine).

There are several excellent point of need references including Micromedix, Lexi-Comp, Briggs handbook and the use of the pharmacist that can determine the impact to the patient from the FDA classifications in pregnancy (risk classes A, B, C, D, X). Combining this information with an awareness of the patient determines whether or not the medication is to be discontinued, reduced in dose or changed.

The same therapeutic thought process holds true in breastfeeding. Use of references, choice of the safest agent, expressing milk based on trough levels can all be employed. Again, it is a matter of what is the safest and the most effective medication for the patient.

In regards the Einarson study listed above and the discontinuation syndromes the mothers experienced, did they need to self-discontinue? This is unlikely as the atypical antipsychotics olanzapine, risperidone and quetiapine are all FDA classification B and C, meaning "animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks."

Reference:
1. Einarson A, Selby P, Koren G: Abrupt Discontinuation Of Psychotropic Drugs During Pregnancy: Fear Of Teratogenic Risk and Impact Of Counselling. J Psychiatry Neurosci. 2001; 26(1):44-8.

Answered by:

Prof. Joel Lamoure

Re-Immunization for Rubella

10.

When is it necessary to re-immunize for rubella?

Question submitted by:
Dr. Maria Yu
Ajax, Ontario

Primary immunization against rubella with a single dose of vaccine after 12-months-of-age leads to conversion rates in excess of 95% and lifelong protection in > 90% of individuals. Recent recommendations for a second dose of measles vaccine resulted in most children receiving two doses of combined measles, mumps, rubella vaccine which provides a further level of protection. Verification of immunity using antibody titres and revaccination of those found to be non-immune, is recommended only for pregnant women and post-pubertal females attending for antenatal, marital and perhaps sexually transmissible infection clinical assessments. Otherwise, validation of vaccination with at least one dose for those born after 1957 is all that is generally required. For those born before 1957, infection was so widespread that these individuals are all presumed to be immune. A small number of women do not seem to seroconvert even after two or more doses. It does not seem reasonable to continue to test them for immunity at each pregnancy and revaccinate. Some of these women appear to have protective cell-mediated immunity, in the absence of detectable antibodies.

Answered by:

Dr. Michael Libman

Complications Associated with Pacemaker Insertion

11.

What are some of the complications associated with pacemaker insertion?

Question submitted by:
Dr. Lorna Hruby
Burnaby, British Columbia

Complications of pacemaker insertion include:

- infection,
- air embolism,
- pneumothorax,
- myocardial perforation,
- pericardial effusion,
- tamponade,
- vascular or nerve damage,
- thrombophlebitis and
- bleeding and arrhythmia (premature atrial contractions, atrial tachycardia, premature ventricular contractions, ventricular tachycardia).

These complications are uncommon when a permanent pacemaker is inserted in the OR or cardiac catheterization laboratory. The complications are more common with temporary pacemaker insertions, particularly when the pacemaker is inserted under emergency circumstances.

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Answered by:

Dr. Chi-Ming Chow