Rocky Mountain Spotted Fever

1. Is Rocky Mountain spotted fever (RMSF) spreading North to Canada and what is the treatment, especially for a patient with chronic recurrent symptoms?

Question submitted by:
Dr. Barbara Lansing
Calgary, Alberta

There is no solid evidence that RMSF is spreading North, although this might be expected as global warming progresses. In Canada, RMSF is rarely seen outside Saskatchewan, Alberta and British Columbia. Although the Atlantic states have the highest incidence of RMSF, few cases are diagnosed North of Massachusetts. The number of cases diagnosed in the US has been increasing in recent years, although the number of deaths has not. The reasons for this are not clear. The usual treatment is doxycycline for one week. Unfortunately, neurologic sequelae, which may be severe, are not uncommon. There is no evidence of persistent infection or benefit from prolonged treatment in these patients. This irreversible neurologic damage appears more likely when treatment is delayed.

Answered by:
Dr. Michael Libman

Copyright©
Not for Sale or Commercial Distribution
Unauthorised use prohibited. Authorised users can download, display, view and print a single copy for personal use

The Effect of Whole Body Vibration on Osteoporosis

2. Could an expert comment on the role of vibration machines as a treatment for osteoporosis?

Question submitted by:
Dr. Aileen Comerton
Ottawa, Ontario

There are a number of companies marketing exercise machines that make use of whole body vibration (WBV) either through vibrating exercise platforms or vibrating dumbbells. There is some evidence for increased muscle tone after short-term exposure to WBV. However, there is a paucity of literature pertaining to the effect of WBV on osteoporosis.

A small pilot study from Belgium[1] showed a small increase in hip BMD at the end of six months. However, a similar study from Finland showed no change. Low back pain has been reported as a side-effect to WBV.

Given the paucity of data, WBV cannot be routinely recommended as a treatment for osteoporosis, but regular weight bearing exercise should continue to be encouraged.

Reference
1. Verschueren SM, Roelants M, Delecluse C, et al: Effect of 6-Month Whole Body Vibration Training on Hip Density, Muscle Strength and Postural Control in Postmenopausal Women: A Randomized Controlled Pilot Study. J Bone Miner Res 2004; 19(3):352-9.

Answered by:
Dr. Elizabeth Hazel

Schatzki Rings

3. Is endoscopy required if a Schatzki ring is seen on upper GI in a patient with no dysphagia?

Question submitted by:
Dr. Laura McConnell
Mississauga, Ontario

Schatzki rings are esophageal mucosal structures at the gastroesophageal junction that are smooth, thin and covered with squamous mucosa above and columnar epithelium below. They are different from muscular rings which are usually seen in children and located below the squamocolumnar junction and characterized by hypertrophic musculature.

Schatzki rings are commonly subtle narrowings and are often not appreciated at endoscopy. In fact, a barium swallow and upper GI series is more sensitive at detecting esophageal rings and strictures since these abnormalities will not be seen unless the lower esophagus is widely distended. This may not occur at endoscopy. If an asymptomatic Schatzki ring is found incidentally on a barium study, there is evidence that suggests these rings do not progress. Thus, no treatment is suggested for these patients. Patients who present with dysphagia are usually successfully treated with esophageal dilatation.

Answered by:
Dr. Jerry McGrath

Facial Hair Removal

4. Is there an alternative for hair removal (on the face) when laser treatments fail?

Question submitted by:
Dr. Sandi C. Frank
Edmonton, Alberta

Hair laser treatments may fail especially if the targeted hairs are too light in colour. Electrolysis can often do a better job on lighter hairs. Some patients achieve a moderate improvement with eflornithine HCl cream 13.9%. As well, physical methods such as waxing, plucking and shaving are acceptable alternatives.

Answered by:
Dr. Scott Murray

Starting a Statin in a Well-Controlled Diabetic

5. At what age would you start a statin in a well-controlled diabetic with normal LDL-C?

Question submitted by:
Dr. Robin Conway
Smith Falls, Ontario

In general, there is no pre-determined age cutoff after which patients with diabetes should or should not be treated with lipid-lowering medications. The decision is primarily based on their risk for vascular disease. Before attempting to answer your question further, there are a number of questions/issues that need clarification. Does this patient have other risk factors, such as the presence of hypertension, smoking history, positive family history, presence of albuminuria, *etc.* that would increase CV risk? Is well-controlled defined as an HbA1C of < 6% without pharmacotherapy or 7% to 8% on multiple agents with or without insulin? The latter patient obviously would be at a somewhat higher risk than the former. What is meant by a "normal LDL-C?" Does this patient have an LDL-C of < 2.0 mmol/L, or between 2.0 mmol/L to 3.0 mmol/L, *etc.*? Lipid-lowering drugs in general and statins in particular are well tolerated and the benefits of treatment outweigh the risks in most cases. Thus, I would aim for an LDL-C of < 2.0 mmol/L to 2.5 mmol/L in almost all patients. I would start as early as possible to minimize the development of complications. Some guidelines and a recently presented study in fact suggest that all diabetics be on a statin irrespective of their baseline LDL-C level, barring contraindications. There is also increasing data accumulating on the use of statins in the pediatric/adolescent population and these agents in general appear to be fairly safe and well tolerated.

Answered by:
Dr. Hasnain Khandwala

ARICEPT® Eisai Co. Ltd., owner/Pfizer Canada Inc., Licensee
© 2008 Pfizer Canada Inc., Kirkland, Quebec H9J 2M5

6. Risk of Recurrent Deep Vein Thrombosis Following Lower-Limb Surgery

In a patient with prior history of deep vein thrombosis (DVT) following lower limb surgery and immobilization, is the risk of recurrent DVT higher than normal?

Question submitted by:
Dr. Shengtao Yao
Grande Prairie, Alberta

The risk of spontaneous thromboembolism is no higher in patients who had previous provoked DVT following lower limb surgery after three months have lapsed since the event, provided that the patient received adequate treatment for the DVT. If such a patient were undergoing treatment that would lead to prolonged immobilization once more, the risk of DVT is usually deemed to be increased after the procedure and warrants adequate prophylaxis, which should usually be extended for 35 to 42 days after the procedure. After this time, the risk recedes to baseline levels.

Answered by:

Dr. Kamilia Rizkalla,
Dr. Kang Howson-Jan and
Dr. Alejandro Lazo-Langner

Stay

with ARICEPT

for patients who benefit from treatment

ARICEPT is indicated for the symptomatic treatment of patients with mild, moderate and severe dementia of the Alzheimer's type. ARICEPT does not change the underlying course of the disease.

In patients with mild-to-moderate AD, the most common adverse events with ARICEPT 10 mg/d after proper dose escalation include nausea, diarrhea, insomnia, vomiting, muscle cramp, fatigue and anorexia (occurring in at least 5% of patients and at twice the placebo rate). These events are usually mild and transient, resolving with continued ARICEPT treatment without the need for dose modification.

In patients with severe AD, the most common adverse events were vomiting, diarrhea, nausea, and aggression (occurring in at least 5% of patients and at twice the placebo rate). Overall, the majority of adverse events were judged by the investigators to be mild or moderate in intensity.

Reference: 1. ARICEPT/ARICEPT RDT Product Monograph, Pfizer Canada Inc., June 2007.

Choose once-a-day
Aricept®
donepezil HCl 5 & 10 mg tablets
right from the start.

See prescribing summary on page 73

Who to Admit for Syncope

7. Who should be admitted for syncope?

Question submitted by:
Dr. Ally Prebtani
Hamilton, Ontario

Syncope is relatively common in the ED, accounting for approximately 1% to 2% of all ED visits. The presentation of syncope evokes a wide differential diagnosis, including potentially life-threatening etiologies as well as more benign entities, such as vasovagal events, orthostasis due to volume loss, autonomic disease, or situational syncope.

One of the popular clinical rules that can help risk stratify patients who present with syncope is the San Francisco Syncope Rule.[1] The criteria demonstrated 96% sensitivity and 62% specificity for serious outcomes at seven days. Serious outcome in this study is defined as "death, MI, arrhythmia, pulmonary embolism, stroke, subarachnoid hemorrhage, significant hemorrhage, or any condition causing a return ED visit and hospitalization for a related event."[1] These criteria are easily recalled by using the mnemonic "CHESS," as outlined in Table 1. A patient with one or more of the CHESS criteria is considered high-risk and should be admitted for further work-up and monitoring.

Reference
1. Quinn JV, Stiell IG, McDermott DA, et al: Derivation of the San Francisco Syncope Rule to Predict Patients with Short-Term Serious Outcomes. Ann Emerg Med 2004; 43(2):224-32.

Answered by:

Dr. Chi-Ming Chow

Table 1

The San Francisco Syncope Rule—CHESS mnemonic

- Congestive heart failure history
- Hematocrit < 30%
- ECG abnormal (non-sinus rhythm, or new changes compared with old ECG)
- Shortness of breath
- Systolic BP < 90 mmHg at triage

8. The Role of Antibiotics and Steroid Therapy for Acute Sinusitis

What is the place of antibiotic and steroid therapy in the treatment of acute sinusitis?

Question submitted by:
Dr. Antoine St-Pierre
Charny, Quebec

It is not generally possible to distinguish acute viral rhinosinusitis (AVRS) from acute bacterial rhinosinusitis (ABRS) in the first 10 days. Since AVRS is expected to resolve within 10 days and ABRS may also resolve spontaneously within the first 10 days, patients who present with < 10 days of symptoms in general should be managed with supportive care. Exceptions would include patients with severe symptoms and worsening clinical course, at the extremes of age and immunocompromised patients.

Topical corticosteroid therapy reduces inflammation and edema in the nasal mucosa. Nasal corticosteroids, as adjunctive to antibiotic therapy, have shown significant reduction in several symptom scores. However, it should be noted that nasal corticosteroids are not approved by the FDA for sinusitis treatment.

There are no controlled clinical trials of systemic glucocorticoids in the treatment of acute rhinosinusitis and we do not suggest using them in the outpatient set-up.

Answered by:

Dr. Ted Tewfik and
Dr. Hasan Alshemari

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:

- healing of NSAID-associated gastric ulcer;
- treatment of NSAID-associated gastric ulcer in patients who continue NSAID use;
- reduction of risk of NSAID-associated gastric ulcers in patients with a history of gastric ulcers who require to continue taking an NSAID.

Controlled studies did not extend beyond 8 weeks for healing and 12 weeks for prevention.

PREVACID®
LANSOPRAZOLE

PRODUCT MONOGRAPH AVAILABLE UPON REQUEST.

© Abbott Laboratories, Limited
Printed in Canada

www.abbott.ca
1 800 361-7852

Abbott
A Promise for Life

The Radioallergosorbent Test

9.

Where does a radioallergosorbent test (RAST) fit into the allergy work-up? What are its limitations?

Question submitted by:
Dr. Peter Seviour
St. John's, Newfoundland

In vitro testing for allergen-specific IgE is useful either as an alternative to skin prick testing or as an adjunct. In patients with extensive eczema that precludes skin testing or those on medications that interfere with skin testing, such as antihistamines, antidepressants with antihistamine activity or those on high-dose prednisone, *in vitro* testing allows for accurate determination of specific IgE levels. In patients with known or suspected food allergies, *in vitro* testing also provides additional information over and above that obtained from skin prick testing.

The ImmunoCAP method of specific IgE determination provides an accurate and reproducible measure of specific IgE. Whereas skin testing is semi-quantitative at best, ImmunoCAP testing is quantitative allowing for longitudinal measures of specific IgE from time to time. For example, yearly ImmunoCAP quantitation of peanut-specific IgE levels will not only provide a measure of the trends in specific IgE, but the rate of decline will also give additional information on the likelihood that a patient will "outgrow" their peanut allergy. A precipitous decline in peanut-specific IgE levels are more likely associated with resolution of peanut allergy than a slow drop in specific IgE levels.

ImmunoCAP testing also allows for determination of the risk of reaction. Thresholds have been established for a number of common food allergies which correlate specific IgE levels with the likelihood of experiencing a reaction following accidental exposure. For example, a level of 15 kU/L of peanut-specific IgE or higher is associated with a 95% likelihood of a clinical reaction upon exposure to peanut.

Answered by:

Dr. Peter Vadas

Conceiving After a Miscarriage

10.

How long after a miscarriage does one need to wait to try to conceive again?

Question submitted by:
Dr. Mark D. Goldstein
Thornhill, Ontario

Traditionally, women have been counselled to wait two to three months prior to trying to conceive again after a miscarriage. The rationale includes allowing time for hormonal levels to return to normal and re-establishment of a normal menstrual cycle to ensure accurate dating of a future pregnancy. However, there is no clear evidence of increased risks to a future pregnancy when patients have conceived again sooner.

Answered by:

Dr. Kimberly Liu

Bed Bugs and Bites

11. How are bed bugs and bites diagnosed and treated?

Question submitted by:
Dr. Steve Choi
Oakville, Ontario

Bed bugs are rarely seen, as they usually live in the cracks and crevices of cushions, mattresses and other furniture and tend to hide during the day. Bites are painless and therefore are noted only hours or a day later when they may become pruritic. Most commonly, they have a wheal with a central hemorrhagic punctum, with lesions a few millimeters in diameter. Untreated lesions may take three to six weeks to heal and new bites may continue to appear. They are difficult to differentiate from other types of bites, such as bites from fleas and mites, making definitive diagnosis very difficult. Careful searching may reveal cast skins. A series of linear lesions found upon awakening is typical. Specks of dung, containing digested blood, may be found in the environment. Symptoms can be treated with topical steroids and/or oral antihistamines. Proper control of an infestation requires a competent pest control professional, ideally one who can identify the bug and, if it is a species associated with bat or bird roosts, also deal with this host problem.

Answered by:

Dr. Michael Libman

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.

CONSULT PRODUCT MONOGRAPH FOR A COMPLETE LISTING OF PREVACID INDICATIONS.

PREVACID® FASTAB
LANSOPRAZOLE DELAYED-RELEASE TABLETS

PRODUCT MONOGRAPH AVAILABLE UPON REQUEST.

© Abbott Laboratories, Limited
Printed in Canada

www.abbott.ca
1 800 361-7852

Abbott
A Promise for Life

Assessing Cardiac Risk Before Elective Surgery

12.

What is the best way to assess cardiac risk before elective surgery?

Question submitted by:
Dr. Val Ginzburg
Thornhill, Ontario

The American College of Cardiology (ACC) and the American Heart Association (AHA) published the updated guidelines on perioperative CV evaluation and care for noncardiac surgery in September 2007.[1] This guideline focuses on the evaluation of the patient undergoing noncardiac surgery who is at risk for perioperative cardiac morbidity or mortality. In patients with known coronary artery disease (CAD) or the new onset of signs or symptoms suggestive of CAD, baseline cardiac assessment should be performed. Among asymptomatic patients, a more extensive assessment of history and physical examination is warranted in those individuals ≥ 50-years-of-age, because the evidence related to the determination of cardiac risk factors and derivation of a revised cardiac risk index occurred in this population. Preoperative cardiac evaluation must therefore be carefully tailored to the circumstances that have prompted the evaluation and to the nature of the surgical procedure proposed.

Reference

1. Fleisher LA, Beckman JA, Brown KA, et al: ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for Noncardiac Surgery: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the 2002 Guidelines on Perioperative Cardiovascular Evaluation for Noncardiac Surgery). J Am Coll Cardiol 2007; 50(17):1707-32.

Answered by:

Dr. Chi-Ming Chow

When to Stop Osteoporosis Treatment

13.

Is there an age to stop treating osteoporosis with risedronate, alendronate, raloxifene, *etc.*?

Question submitted by:
Dr. Claude Roberge
Sherbrooke, Quebec

The goal of treating osteoporosis is to prevent the pain, loss of mobility and associated mortality of bone fractures. The risk of fracture increases with age, as does the risk of falling. All patients should be advised of the importance of adequate calcium, vitamin D and weight bearing exercise. Ensuring that elderly patients are receiving adequate vitamin D is important, especially if they are institutionalized. The decision to treat with bisphosphonates or other antiresorptive agents must be tailored to each patient, but there is no age after which patients should routinely stop these medications.

Answered by:

Dr. Elizabeth Hazel

Leukoplakia of the Tongue

14.

How do you approach leukoplakia of the buccal mucosa or tongue?

Question submitted by:
Dr. Catherine McCuaig
Montreal, Quebec

Leukoplakia is a white oral plaque that cannot be rubbed off. It can be the result of many etiologies—the most feared is malignancy, but a variety of benign causes must be considered in diagnosis. Differential diagnosis includes lichen planus, chemical burns, bite lines, psoriasis, tobacco use, lupus, squamous cell cancer, white sponge nevus and oral hairy leukoplakia. A thorough history, especially of tobacco use, cigarettes, tobacco chewing, pipe, lichen planus, psoriasis and evidence for immunosuppression, needs to be taken. A full skin exam is helpful. There must be a careful assessment for erosions, nodules, verrucous surface and involvement of the floor of the mouth or underside of tongue to detect signs more suggestive of squamous cell neoplasm. This involves palpating the lesion. Lymph nodes should be felt. A biopsy is indicated if a benign etiology cannot be implicated.

Answered by:
Dr. Scott Murray

Differential Diagnosis of Elevated γ-Glutamyl Transpeptidase

15.

What is differential diagnosis of elevated γ-glutamyl transpeptidase (GGT)?

Question submitted by:
Dr. Brent E. Bukovy
Thunder Bay, Ontario

GGT is an enzyme present in cell membranes in many tissues such as the liver, kidneys, pancreas, spleen, heart, brain and seminal vesicles. Elevated serum activity is found in diseases of the liver, biliary tract and pancreas. It is elevated in those with cholestatic hepatobiliary disease in a similar fashion to alkaline phosphatase. However, an elevation in serum GGT is not specific for cholestatic liver disease. Solitary elevation of serum GGT values is found in patients who ingest alcohol or secondary to medications such as barbiturates or phenytoin. Thus, an isolated elevation in serum GGT may be an indicator of alcohol abuse or alcoholic liver disease. Serum GGT has no advantage over aminotransferases and alkaline phosphatase in evaluating for liver disease other than conferring liver specificity to an elevated alkaline phosphatase or identifying patients with alcohol abuse.

Answered by:
Dr. Jerry McGrath

Tonsil and Adenoid Surgery

16.

Who gets a tonsillectomy these days? Is it still six bouts a year? Is tonsil and adenoid surgery ever indicated as part of treatment for middle ear effusion that persists in an average 10-year-old girl?

Question submitted by:
Dr. Gayle Garber
Conception Bay South, Newfoundland

The main reasons for a tonsillectomy are recurrent infections and/or obstructive sleep apnea (OSA). Six episodes of tonsillitis per year (causing one to miss 20 days of school or work per year), is considered an indication for tonsillectomy. Recurrent peritonsillar abscess is another indication.

Very large tonsils (and adenoids) can cause OSA. Typically, someone with OSA snores very loudly, then becomes silent for about 10 seconds (despite an effort to breath), then gasps for air and then starts snoring again. People with OSA may be very tired and/or irritable during the daytime.

The diagnosis of OSA is usually made clinically and is confirmed by oximetry and or polysomnography. Occasionally, tonsils are removed because a tumour is suspected.

Regarding adenoidectomy and otitis media with effusion (OME), many randomized clinical trials have demonstrated favourable effects on OME if the adenoid is removed. These results indicate that OME might be improved after adenoidectomy as the inflammatory environment in the nasopharynx is improved owing to elimination of an infectious focus. Removal of the tonsils in these cases has shown no effect on the course of OME.

cme

Answered by:
Dr. Ted Tewfik