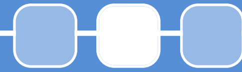

Raynaud's Phenomenon

1. Does repeated exposure to cold accelerate the course of Raynaud's?

Question submitted by:
Dr. Jenny Molson
Kingston, Ontario

Primary Raynaud's phenomenon is an exaggerated response to cold or emotional stimuli, causing local vasoconstriction. There is some evidence that this is mediated in part by abnormal α-adrenergic responses. The major advice given to patients with primary Raynaud's is to avoid cold exposure and thus decrease symptomatic episodes. Primary Raynaud's does not usually worsen with time.

In secondary Raynaud's (*i.e.*, associated with systemic scleroderma), there is underlying vascular disease. In these cases, it is possible that repeated ischemic insult with reperfusion may cause an increase in the number of reactive oxygen species, which may in turn accelerate the endothelial dysfunction.

Answered by:
Dr. Elizabeth Hazel

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The Effects of Combining ACE Inhibitors and ARBs

2. When is the association of ACE inhibitors and ARBs recommended? What are the benefits?

Question submitted by:
Dr. Gilbert Blanchard
Bas-Caraquet, New Brunswick

The combination of ACE inhibitors and ARBs leads to a further reduction in BP than when either agent is used alone. However, the addition of a diuretic, direct renin inhibitor, or a calcium channel blocker provides greater BP lowering than the combination of ACE inhibitors and ARBs. Some studies have demonstrated greater reduction in proteinuria in patients with diabetic and non-diabetic nephropathy when the combination is used, compared to maximum doses of either agent alone. However, in the Ongoing Telmisartan Alone and in Combination with Ramipril Global Endpoint Trial (ONTARGET), in which the combination of ramipril and telmisartan was studied against either agent used alone, the combination did not demonstrate any significant benefit on CV outcomes. Furthermore, an increase in adverse renal events was noted. Thus, at this time there is no evidence to support the use of combination therapy; in fact, ONTARGET would suggest that it should be avoided.

Answered by:
Dr. Hasnain Khandwala

The Incidence of Zygomycosis

3. What is the incidence of mucormycosis?

Question submitted by:
Dr. Michel Bernier
Ste-Foy, Quebec

Although mucormycosis is the common and familiar term, the microbiologically correct term is actually zygomycosis. Almost all patients with invasive zygomycosis have some underlying disease that predisposes to the infection. The most common are diabetes mellitus, use of glucocorticoids, hematologic malignancies and solid organ transplantation. The incidence of disease in diabetics in the US, but not necessarily in developing countries, appears to be decreasing. The reasons for this are unclear, but may be due to the increased use of statins, which are inhibitory to these fungi. On the other hand, the incidence in patients with hematologic malignancies may be increasing. This could be linked to the use of prophylactic voriconazole in some centres. This agent is effective against many fungi, but may select for infections with the intrinsically resistant zygomycetes. As a consequence, rhino-orbital-cerebral infection, most common in diabetics (especially with ketoacidosis), appears to be less common and infection of other sites relatively more frequent.

Answered by:
Dr. Michael Libman

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Latest Guidelines for Treatment of Peripheral Arterial Disease

4. What are the latest Canadian consensus guidelines for the treatment of peripheral arterial disease (PAD)?

Question submitted by:
Dr. Paul Stephan
Scarborough, Ontario

PAD is an often asymptomatic, under-diagnosed, underrecognized and undertreated condition. It is associated with significant morbidity and cardiac mortality. To ensure better recognition and treatment of PAD, the Canadian Cardiovascular Society (CCS) Consensus Conference on PAD was published in 2005.[1] The executive summary is available online at the CCS website: http://www.ccs.ca/download/consensus_conference/consensus_conference_archives/CCFinalPre_CJC_Pub.pdf.

Reference
1. Abramson BL, Huckell V, Anand S, et al: Canadian Cardiovascular Society Consensus Conference: Peripheral Arterial Disease-Executive Summary. Can J Cardiol 2005; 21(12):997-1006.

Answered by:
Dr. Chi-Ming Chow

Annual Fecal Occult Blood Testing

5. After surveilling colonoscopy in asymptomatic patients, is annual stool for occult blood testing still indicated?

Question submitted by:
Anonymous

Colonoscopy is the best test to prevent colorectal cancers and deaths—it can find most polyps and cancers. Colonoscopy has the added benefit that lesions can be removed during the same procedure. There are limitations to colonoscopy including the need for sedation, risk of perforation, post-polypectomy bleeding and incomplete examination.

Annual or biennial screening with a fecal occult blood test (FOBT) reduces the incidence and mortality rate of colorectal cancer as well. However, only 2% of patients with a positive test have cancer. Thus, for every patient with cancer, about 50 patients are subjected to anxiety. FOBT is not designed for the detection of polyps since polyps usually do not bleed. Thus, if a patient has a positive FOBT after a screening colonoscopy, it is usually a false-positive result, necessitating unnecessary repeat examinations.

When colonoscopy is performed for screening and a technically adequate examination occurs with a good bowel preparation, additional screening with FOBTs is not indicated.

Answered by:

Dr. Jerry McGrath

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Following-Up on Vulvar Lichen Sclerosis

6. How often should patients with genital lichen sclerosis be followed for possible malignancy?

Question submitted by:
Dr. Charles Lynde
Markham, Ontario

Patients with vulvar lichen sclerosis appear to have a higher incidence of squamous cell carcinoma (SCC) of the vulva. Initial diagnosis should be made clinically and confirmed by biopsy. Because of the increased incidence of SCC, these patients should be examined at least yearly. Any persistent or non-resolving lesions should be biopsied at that time.

Answered by:

Dr. Kimberly Liu

New Treatments for Recalcitrant Balanitis

7. What are the new treatments for recalcitrant balanitis?

Question submitted by:
Dr. Bradley Atkinson
Sheet Harbour, Nova Scotia

Balanitis is a common recurrent inflammatory condition of the glans penis. It is usually a mix of inflammation, bacterial overgrowth and yeast proliferation that arises from the moist environment under the foreskin. It is more common in diabetes—a condition that always should be ruled out. The first order of business is making sure more stable eruptions such as erythroplasia (squamous cell cancer *in situ*), psoriasis, lichen planus and Zoon's plasmacellularis are considered. For basic management, I have the patient retract the foreskin frequently, cleanse gently with mild soap and air dry the glans, especially after intercourse. I usually recommend a mixture of hydrocortisone and clotrimazole or ciclopirox cream to be applied twice a day. I also reassure the patient that relapses are common and therefore the cleansing and topical applications may be needed recurrently. Some patients who suffer frequent and painful episodes may elect a circumcision which is usually curative.

Answered by:

Dr. Scott Murray

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Renal Imaging After Urinary Tract Infections in Children

8. What are the guidelines for renal imaging after a urinary tract infection (UTI) in children?

Question submitted by:
Dr. Reena Suri
Calgary, Alberta

While previously limited to imaging boys with first-onset UTIs, there are guidelines that recommend that all children with a first-onset UTI, regardless of gender, have renal imaging with a voiding cystourethrogram (VCUG) and renal ultrasound. The evidence for this approach is weak, but the evidence for not imaging is equally weak. There is a study done by Mahant, *et al*[1] which suggests that the renal ultrasound adds little to the VCUG. The precise role of imaging of the kidney and urinary tract following UTI in children remains unclear. This author does have a VCUG and renal ultrasound done in all children under age three who present with first-onset UTI—an approach which, with respect to the VCUG, the current literature neither supports or refutes.

Reference
1. Mahant S, Friedman J, MacArthur C: Renal Ultrasound Findings and Vesicoureteral Reflux In Children Hospitalised With Urinary Tract Infection. Arch Dis Child 2002; 86(6):419-20.

Answered by:

Dr. Michael Rieder

Treatment for Psoriatic Arthritis After NSAID Use

9.

What is the current treatment for moderately active psoriatic arthritis after the use of NSAIDs?

Question submitted by:
Dr. Gerry Bally
Carp, Ontario

The treatment of psoriatic arthritis depends on the severity of the disease. Factors which predict progressive joint damage include a polyarticular presentation and previous use of steroids. For mild disease, which affects fewer than four joints, NSAIDs may be sufficient to control the arthritis. However, when the arthritis is more active, or involves four or more joints, the use of a second-line agent should be considered.

Unfortunately, there is a paucity of good data to aide the clinician in selecting the appropriate second-line therapy. Both methotrexate and sulfasalazine are options in these cases. These agents have also been shown to improve psoriatic skin disease. The former is my first choice in the absence of contraindications, such as an abnormal baseline liver profile.

In severe cases of psoriatic arthritis, the use of biologic agents is warranted and has proven quite effective for both skin and joint disease. However, recent data has suggested that early use of methotrexate at appropriate dosing may reduce the need for these expensive medications. Early referral to a rheumatologist is warranted in any patient with an inflammatory arthropathy.

Answered by:
Dr. Elizabeth Hazel

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Absorption and Efficacy of Iron Preparations

10.

How do currently-available iron preparations vary in terms of absorption and efficacies?

Question submitted by:
Dr. Roland Genge
Baddeck, Nova Scotia

Ferrous sulphate, fumarate and gluconate all yield approximately equivalent amounts of absorbable iron. Although the amount of elemental iron in each preparation varies somewhat, they can be considered equivalent in terms of efficacy.

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

Sinus Rinses for Sinusitis

11.

Patients are asking me about sinus rinses for sinusitis. What is being used and what are the indications for using this therapy over antibiotics?

Question submitted by:
Dr. David Buckley
St. John's, Newfoundland

Saline solutions (sinus rinses) are used as adjunctive therapy for sinusitis to enhance drainage, by increasing mucociliary flow rates and mechanically rinsing away irritants from nasal passages.

Nasal saline used in conjunction with topical corticosteroid sprays can lessen or eliminate the adverse effects of corticosteroid sprays such as burning sensation, drying, crusting and bleeding. Also, using the sinus rinses before the topical corticosteroid will increase the absorption and the cellular effect of the topical steroids.

Patients with chronic sinusitis are therefore instructed to use saline at least twice daily as a preventative measure, rather than starting when clinical symptoms manifest. However, no comparative studies have documented the therapeutic efficacy of nasal saline in the treatment of sinusitis over antibiotics.

Answered by:

Dr. Ted Tewfik and Dr. Hasan Alshemari

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Transmission and Incubation Period of Herpes Zoster

12.

Is herpes zoster contagious? What is the incubation period?

Question submitted by:
Dr. D. Eustace
Saskatoon, Saskatchewan

Herpes zoster, or "shingles," is caused by reactivation of a latent varicella-zoster virus (VZV) infection, usually in a single dorsal root ganglion leading to single dermatomal disease. The virus can cause varicella in any exposed non-immune person. Despite some folklore, it is very rare for a first infection with VZV to manifest as zoster; it is virtually always systemic and therefore presents as "chicken pox." Therefore, as a rule, one cannot contract zoster from exposure to zoster. In zoster, the virus is only found in skin lesions and transmission requires close contact with these lesions. In varicella, the lungs are involved and the transmission may be airborne. The incubation period from contact to first symptoms is about 10 to 21 days, typically at the shorter end of the range with more intense contact.

Answered by:

Dr. Michael Libman

Treating a Patient with Low HDL-C

13. In a healthy, middle-aged male runner with normal BP, LDL-C and triglycerides, do you need to worry about and treat a low HDL-C?

Question submitted by:
Dr. Douglas Drover
St. John's, Newfoundland

The 2001 National Cholesterol Education Program (Adult Treatment Panel [ATP] III) guidelines[1] identified the following HDL-C < 1.0 mmol/L as being at high risk. The primary target of therapy remains to be LDL-C. This goal should be reached before treating low HDL-C. Patients with low HDL-C are recommended to intensify weight management, increase physical activity and encourage smoking cessation.

It is important to assess the global CV risk of the patient. I would assume you are describing a patient who is at low CV risk level (< 1% of CV risk per year). Total cholesterol (TC)/HDL-C level is a more robust predictor of CV risk.

A level of TC/HDL-C > 6.0 is currently recommended by the latest Canadian lipid recommendations.[2]

References
1. Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). Circulation 2002; 106(25):3143-421.
2. McPherson R, Frohlich J, Fodor G, et al: Canadian Cardiovascular Society Position Statement–Recommendations for the Diagnosis and Treatment of Dyslipidemia and Prevention of Cardiovascular Disease. Can J Cardiol 2006; 22(11):913-27.

Answered by:
Dr. Chi-Ming Chow

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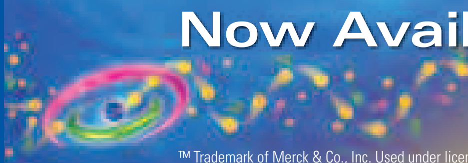
Keloid Treatment

14. What is the up-to-date keloid treatment for Caucasian patients, both conservative and surgical?

Question submitted by:
Dr. I. D'Souza
Willowdale, Ontario

Treatment of keloids is always an uphill battle. Surgical attempts to remove them risk recurrence and sometimes worsening. Surgical removal is usually followed by intralesional steroid injection, imiquimod therapy, or direct pressure (ear clips, *etc.*). Other therapies include corticosteroid injection, repeated every few weeks, cryotherapy, silicone gel dressings and pulsed dye laser.

Answered by:
Dr. Scott Murray



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Course of Therapy for Eradication of *H. Pylori*

15.

What is the shortest effective course of therapy for eradication of *Helicobacter pylori* (*H. pylori*)?

Question submitted by:
Dr. David Hawkins
Westbank, British Columbia

Many randomized controlled trials have been conducted to evaluate *H. pylori* eradication. Despite the large number of trials, the optimal duration has not yet been defined. Currently, *H. pylori* eradication therapy recommended for first-line treatment is triple therapy with a PPI twice a day, amoxicillin and clarithromycin for seven to 14 days. A longer duration of treatment may be more effective in curing infection but this remains controversial. A meta-analysis suggested that extension of triple therapy from seven to 14 days was associated with only a 5% increase in eradication rates.[1] Their conclusion was that available data suggest that extending triple therapy beyond seven days is unlikely to be a clinically useful strategy. In the case of a patient who has failed a seven day course of triple therapy, they should be retreated with a 14-day course.

Reference
1. Fuccio L, Minardi ME, Zagari RM, et al: Meta-Analysis: Duration of First-Line Proton-Pump Inhibitor Based Triple Therapy for Helicobacter Pylori Eradication. Ann Intern Med 2007; 147(8):553-62.

Answered by:
Dr. Jerry McGrath

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Screening Test for Autism

16.

Are there some simple screening tests for autism?

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

Autism and other pervasive developmental disorders are among the most feared developmental problems in children and thus it is important for child healthcare providers to be familiar with the early presentation of these disorders. In order to provide a screen for these problems, specific instruments have been developed, including the Checklist for Autism in Toddlers (CHAT). This instrument consists of nine yes/no questions directed to the child's parents. CHAT is a quick, easy-to-use screening test designed for use by primary healthcare providers for children aged 18 to 36 months in which there is a concern with respect to autism. In the event of a positive screening test, timely referral for more definitive testing and evaluation is indicated.

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Answered by:
Dr. Michael Rieder