Consultant's Corner

Practical Answers To Your Everyday Questions

1. Hormone Replacement Therapy

Do you recommend hormone replacement (HRT) therapy for a few years even if a menopausal woman has no symptoms?

Question submitted by:
Dr. Guy Frenette
Cap-Sante, Quebec

In the past, HRT was advocated in virtually all menopausal women to help with the distressing symptoms of menopause, bone health, Cardiovascular disease CVD risk, and cognitive health. With the negative findings in large scale clinical trials of increased risk for CVD and breast cancer, HRT is now discouraged. The only role for HRT is in the severely symptomatic woman with debilitating symptoms of hot flashes, night sweats, sleeplessness and vaginal atrophy where nothing else has worked and where she has no contraindications. HRT is prescribed in the lowest dose to relieve symptoms with a progesterone agent if the woman has her uterus. Women are encouraged to titrate off the HRT as soon as possible. Other medications and alternatives are available for bone and CV health.

Dr. Cathy Popadiuk

2. Risks Associated with Warfarin

Vitamin K is needed to produce protein "C" and other antithrombotic substances. What is the risk in starting:
• Full dosage warfarin *e.g.*, for deep vein thrombosis (DVT) and 2)
• Low dose warfarin *e.g.*, post knee anthroscopy, without first using haparin?

Question submitted by:
Dr. Robert Clending
Sudbury, Ontario

Warfarin is administered in an initial dose of usually 5 mg a day for the first two days, with the daily dose then adjusted according to the INR. The initiation of warfarin therapy, with initial loading doses in excess of 10 mg has several potential complications:

- Transient hypercoagulable state due to a precipitous decline in protein C levels in the first 36 hours
- Precipitous decline in factor VII, resulting in an initial prolongation of the INR before onset of the full antithrombotic effect, which does not occur until there has been significant reduction in factor II. This also illustrates the necessity for overlap of heparin and warfarin therapy for four to five days
- Depending on the indication for anticoagulation, if immediate anticoagulation effect is necessary, (e.g., DVT, or pulmonary embolism), overlapping intravenous subcutaneous (IV/SC) heparin and oral warfarin will be required.

Dr. Chi-Ming Chow

Cholera and Traveller's Diarrhea Vaccine

3. For foreign travel (Caribbean), what percentage of diarrhea can be prevented with the administration of traveller's diarrhea vaccine?

Question submitted by:
Dr. Peter Lee
New Glasgow, Nova Scotia

Traveller's diarrhea vaccine is an oral, killed whole-cell vaccine. It consists of nontoxic B subunit of cholera toxin. It also provides significant protection against infection with enterotoxigenic *Escherichia coli* (ETEC) because the B-subunit of cholera toxin is similar to the enterotoxin of ETEC.[1]

This vaccine has been shown to reduce the incidence of diarrhea caused by ETEC by 52 to 67%.[2-3] However, not all traveller's diahrrea is caused by ETEC. An estimate that took into account the incidence of ETEC infection and the efficacy of the vaccine revealed that about 7% of all traveller's diarrhea cases would be prevented by the vaccine. The Infectious Diseases Society of America concluded that the decision to use the vaccine to prevent traveller's diarrhea must balance its cost, adverse effects, and limited utility.[4]

References
1. Wiedermann et al. Double-blind, randomized, placebo controlled pilot study evaluating efficacy and reactogenicity of an oral ETEC B-subunit-inactivated whole cell vaccine against travelers' diarrhea (preliminary report). J Travel Med. 2000 Jan;7(1):27-9.
2. Clemens et al. Cross-protection by B subunit-whole cell cholera vaccine against diarrhea associated with heat-labile toxin-producing enterotoxigenic Escherichia coli: results of a large-scale field trial. J Infect Dis. 1988 Aug;158(2):372-7.
3. Peltola et al. Prevention of travellers' diarrhoea by oral B-subunit/whole-cell cholera vaccine. Lancet. 1991 Nov 23;338(8778):1285-9.
4. Hill et al. The practice of travel medicine: guidelines by the Infectious Diseases Society of America. Clin Infect Dis. 2006 Dec 15; 43(12):1499-539

Dr. Jerry McGrath

Checking TSH Levels

4. If the TSH is at the upper range of normal, how often would you recheck it?

Question submitted by:
Dr. Steve Choi
Oakville, Ontario

The value of screening for hypothyroidism at a routine examination in the absence of symptoms or findings on exams is controversial. The United States Preventative Services Task Force does not recommend routine screening for thyroid disease in children or adults whereas the American Thyroid Association and the American Association of Clinical Endocrinology recommend measurement of TSH beginning at 35-years-of-age and every five years thereafter, particularly in women. In addition, a clinical consensus group recommended against population based screening but suggested that aggressive case finding was reasonable in women > 60-years-old and others at high-risk for thyroid dysfunction such as a family history of thyroid disease, personal history of autoimmune disorders or Type 1 diabetes, *etc.* Thus, if a patient is asymptomatic, has a high normal TSH and is not contemplating pregnancy, it seems reasonable to recheck the TSH every five years, or sooner if the clinical situation changes.

Dr. Hasnain Khandwala

Multiuse Vitamins

5. Can multiuse vitamins which contain folic acid increase the risk of hematologic malignancies?

Question submitted by:
Dr. M O'Neil
Collingwood, Ontario

Folate is a B vitamin essential for DNA synthesis, methylation and repair. Folic acid, the synthetic form, is used as single vitamin and in multivitamin supplements. The role of folate in cancer prevention has been described in population-based studies. However, recent large randomized trials have not confirmed these findings and have further raised concerns that folic acid supplementation can potentially increase the risk of malignancies. The majority are lung, colon, or prostate cancer subgroups at higher risk rather than hematologic malignancies. However, further clinical trials will be required to tease out if multiuse vitamins containing folic acid do increase the risk of hematologic malignancies and if so at what duration, exposure levels, and with what concomitant risks.

It is important to understand that folic acid supplementation is important to reduce neural tube birth defects and for replacement therapy in patients with folate deficiency. The risk of malignancies in these settings is not known.

Dr. Kang Howson-Jan and Dr. Cyrus Hsia

Treatment for *Salmonella* spp.

6.

In documented salmonella spp, diarrhea after 10 days of supportive treatment, what is the management of choice?

Question submitted by:
Dr. Sher Clain
Halifax, Nova Scotia

Salmonella gastroenteritis, as opposed to enteric fever, is generally a self-limited disease. Indeed, by the time the report is issued by the lab, the patient is typically well on the road to recovery. Therapy is supportive, directed at replacing fluid and electrolytes. Several years ago, a large meta-analysis showed no benefit from antimicrobial treatment on any clinical parameters. On the contrary, the treatment groups had more relapses and more medication-induced adverse events. As usual, antimicrobial therapy may benefit certain groups, such as neonates, the elderly and the immunocompromised. Treatment should be based on *in vitro* susceptibility results. Quinolones, cotrimoxazole, or amoxicillin are the most commonly used, but resistance to all of these agents is becoming widespread. *Salmonella* has a proclivity for infecting atherosclerotic plaques, and preemptive treatment should be considered for those with endovascular abnormalities and prosthetic vascular grafts, as well as to help control institutional outbreaks.

Dr. Michael Libman

Coenzyme Q10 in Parkinson's Treatment

7.

Is there a role for coenzyme Q10 in the treatment of Parkinson's disease?

Question submitted by:
Dr. Menuccia Gagliardi,
Sidney, BC

Parkinson's disease (PD) is a progressive degenerative neurological disorder where major symptoms result from a decrease in central nervous system dopamine. Treatment strategies are aimed at increasing central dopamine, especially in the basal ganglion. No treatment to date has been shown to slow progression of the underlying process of the disease. In 2002, a report in a small number of patients revealed that the use of coenzyme Q10 at dosages of up to 1200 mg q.d. may slow progression of the disease.[1] Though results appear promising, the study was conducted on a very small number of patients. The National Institutes of health has funded a larger study, which is currently ongoing and is looking at whether these preliminary findings are in fact true. Until the study is completed, there is no current indication for the use of coenzyme Q10 in patients with PD.

Reference
1. Rosenberg RN: Mitochondrial therapy for Parkinson disease. Arch Neurol. 2002; 59(10):1523

Dr. Ashfaq Shuaib

Risks Associated with Q Fever

8. How does Q fever manifest and what are the risk factors for acquiring it?

Question submitted by:
Dr. Craig Render
Keowna, BC

Self-limited febrile illness is probably the most common form of Q fever. Some infections are likely completely asymptomatic. Pneumonia is the next most likely form, often presenting as an incidental finding in a patient with a febrile illness. It may also present as a classic "atypical pneumonia" and occasionally as a rapidly progressive pneumonia. Hepatitis is common in France and rare manifestations include endocarditis and osteomyelitis. The organism mainly infects domestic livestock, as well as many other animals such as domestic cats. Most often, spread to humans occurs when highly infected placentas from these animals dry and the organism is aerosolized. Even indirect contact with these aerosols can result in human illness. Thus in rural areas, exposure to infected straw, manure, and dust from farm vehicles have all been implicated, including simply living next to a road used to transport farm animals. An outbreak involving thousands of cases has been ongoing in southern Holland for several years, and has been linked to goat dairy farms. In urban areas, exposure to parturient cats appears to be an important exposure. The American military has reported many cases from soldiers stationed in rural areas of Iraq. Human to human spread appears to be exceedingly rare.

Dr. Michael Libman

Various Causes of Rhinitis

9. Why do older people get a persistent "runny nose" without upper respiratory tract infections? Is there any treatment?

Question submitted by:
Dr. Jane Purvis
Peterborough, Ontario

Rhinitis is commonly caused by a viral infection or allergy. Older people, however, may develop atrophic rhinitis, vasomotor rhinitis, gustatory rhinitis, and or drug-induced rhinitis

- Atrophic rhinitis occurs when the mucous membranes of the nasal passages atrophy causing the passages to widen and dry out and become more vulnerable to infection. This condition may result from aging itself or from chronic infection, sinus surgery, and or radiation therapy. Treatment may involve the use of salt water into the nose to keep the nasal passages moist. Topical antibiotics if the crusting becomes severe, other antibiotics, given by mouth, may help
- Vasomotor rhinitis occurs when blood vessels in the nose dilate or constrict in response to irritants such as cigarette smoke. Avoiding irritants is the primary treatment, warm humidified air may also help. Antihistamine nasal spray also works because it dries out the mucus
- Gustatory rhinitis is triggered by eating. Hot, spicy foods and alcohol have been reported to cause the most severe symptoms. Many cold foods can also be culprits. Treatment involves avoiding problematic foods and extremely hot or cold foods.
- Drug-induced rhinitis is caused by a variety of drugs, including estrogen, antihypertensives, such as ACE inhibitors and β-blockers, antidepressants, ASA, and some anti-anxiety drugs. Using decongestant nasal sprays for more than three days at a time can lead to rebound nasal congestion. Treatment involves discontinuing the drug that causes symptoms

Dr. Ted Tewfik

Drop of BP with Cessation of Smoking

10.

With smoking cessation as a lifestyle intervention in hypertension, how much is the BP expected to drop after?

Question submitted by:
Dr. J Mitchell

It is of interest to note that although smoking itself does not appear to cause persistent hypertension, it markedly increases the CV risk in hypertensive patients. A number of short-term (approximately one week) smoking cessation studies have shown reductions in AMBP, heart rate (HR) and sympathetic nerve activity among male habitual smokers with normal blood pressures BPs. Although the decrease in night time BP was not prominent compared with that in daytime BP.

In a separate Taiwan study, smoking cessation among hypertensive patients was shown to provide a reduction of mortality risks similar to a permanent reduction of 40 mmHg in BP, over and above any antihypertensive medications. Appreciating this relationship enables physicians to bridge the clinical disconnection and motivates hypertensive smokers to seek smoking cessation.

Dr. Chi-Ming Chow

Recurrent Cellulitis

11.

What investigations and treatments can be done for recurrent cellulitis and edema of legs?

Question submitted by:
Dr. H William
Cornwall, Ontario

The investigations for this can be quite long. You need to ascertain if there is venous compromise—varicosities, clots, phlebitis, congestive heart issues, renal disorders, or lymphatic damage post-surgical procedures or infectious causes. Then you can tailor your search within these fields for immunocompromised states. The recurrence of cellulitis should prompt a search for immunocompromised, diabetes or a portal of entry for infection such as skin conditions of the feet of a leg ulcer. The treatments can then be determined with adequate antibiotics and edema control. The edema itself needs to be managed by treating underlying conditions and compression to a degree adequate to relieve stasis.

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Dr. Scott Murray