Consultant's Corner

Practical Answers To Your Everyday Questions

Treating *H. pylori* infections

1. What is the current thinking on *H. pylori* infections? Keep or eradicate?

Question submitted by:
Dr. John Dawson
Ottawa, Ontario

Helicobacter pylori (H. Pylori) is associated with an increased risk of:

- duodenal and gastric ulcers,
- gastric cancer and
- gastric lymphoma.

It may play a role in causing functional dyspepsia. A patient found to be infected should be treated, to reduce the risk of these conditions.

Deciding which patient to test for infection is usually the more difficult question. Population screening is not recommended.

I only test patients who I feel may have an *H. pylori*-related condition, such as peptic ulcer disease.

Answered by:
Dr. Mark R. Borgaonkar

OCs and the risk of breast cancer

2. What does the WHO say about oral contraceptives and the risk of breast cancer? How about the Canadian Association of SOGC?

Question submitted by:
Dr. Katherine Philips
Toronto, Ontario

The World Health Organization (WHO) reports a slight increase in the risk of breast cancer in women who use oral contraceptives (OC), citing a 1996 meta-analysis that reported a recidivism rate of 1.24% for current users. This risk gradually decreased over 10 years, after which the risk for past and never users is the same. Because most OC users are young with a very low baseline risk, the attributable risk associated with use is also very low.

The SOGC Clinical Practice *Guidelines on Contraception* notes that this is an area of controversy, citing the same article, but noting a more recent case-control study of 9000 women that does not identify an increased risk of breast cancer in current or past users. The authors of the original article caution that this study may not be definitive in current users aged 45 years to 64 years where a non-significant increase in risk was noted.

Answered by:
Dr. Susan Chamberlain

Initiating amitriptyline

3.

When initiating amitriptyline at low doses (*i.e;* 10mg to 25 mg), is it necessary to order an ECG to check for a prolonged QT interval?

Question submitted by:
Dr. Greg Steffens
Barrie, Ontario

Low doses of amitriptyline are often used for the treatment of muscle cramps, neuralgia, *etc*. These low doses are not innocuous and may result in resting tachycardia and significant orthostatic hypotension. This is particularly problematic among patients 60 and older and for those who are also taking diuretics. Therapy is relatively contraindicated among patients with conduction abnormalities with symptomatic hypotension.

Amitriptyline is one of the drugs confirmed to prolong the QT interval and is accepted as having a risk of causing *torsade de pointes.* The risk of drug-induced *torsade de pointes* is extremely low when a single QT interval-prolonging drug is prescribed.

Monitor blood pressure and pulse rate prior to and during initial therapy. Baseline and follow-up ECGs are recommended, especially among older adults and patients with cardiac disease.

Answered by:
Dr. Chi-Ming Chow

Severe back pain

4.

A patient suffers from severe pain in her lower back. It has spread to her left hip and right thigh. She has two young children but her pain is so bad that she is considering ending her life. Is there anything she can do to alleviate the pain?

Question submitted by:
Dr. Chris Ellis
Toronto, Ontario

Back pain of this severity requires thorough evaluation to establish an anatomical diagnosis. An infiltrating process in the:

- spine,
- posterior pelvis, or
- lumbosacral nerve roots

should be excluded.

Infiltrating lesions characteristically cause pain that increases at rest. Spinal stenosis or a neurological cause for pain should also be in the differential diagnosis. In the absence of pathological findings, somatic symptoms presenting as a manifestation of important psychological distress may be present. During the period of investigation, adequate analgesia should be provided, with caution regarding the patient's psychological status.

Answered by:
Dr. Mary-Ann Fitzcharles

When to order immunofixation with serum protein

5.

When do you order immunofixation with serum protein electrophoresis?

Question submitted by:
Dr. M. Maclean
Halifax, Nova Scotia

Immunofixation should be performed when the serum protein electrophoresis reveals a suspicious band, or for routine follow-ups in patients with a known monoclonal immunoglobulin (multiple myeloma,Waldenstrom's macroglobulinemia, or monoclonal gammopathy of unknown significance).

Answered by:
Dr. Kang Howson-Jan
Dr. Kamilla Rizkalla

Patients with subclinical hyperthyroidism

6.

What is the current approach to patients with subclinical hyperthyroidism? What about hypothyroidism?

Question submitted by:
Dr. Joel Kailia
Nova Scotia

There is controversy regarding the appropriate management of patients with both subclinical hyper and hypothyroidism. There is evidence that subclinical hyperthyroidism (low thyroid-stimulating-hormone with normal thyroid hormone parameters [fT4 and fT3]) is associated with atrial fibrillation, increased bone resorption and osteoporosis. Studies, however have not yet demonstrated an increase in the risk of fractures. The current approach that is followed by most endocrinologists is to consider treatment if the thyroid-stimulating hormone (TSH) is persistently suppressed, particularly to < 0.10 IU/L. Treatment becomes more appealing in patients who either have, or are at risk for osteoporosis and cardiovascular disease.

With respect to subclinical hypothyroidism (elevated TSH with normal fT4 and fT3 levels), studies have demonstrated an association with dyslipidemia and reduced cardiac contractility. Most endocrinologists would favour treating if the TSH is >10 IU/L, particularly in the presence of antithyroid antibodies. There is very little evidence of any deleterious effects of subclinical hypothyroidism when the TSH is between 5 IU/L and 10 IU/L, nor are there any intervention studies showing benefit of treatment in such cases.

Answered by:
Dr. Hasnain Khandwala

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7. Treatment for herpes zoster

Should treatment for herpes zoster continue until all the lesions have healed?

Question submitted by:
Dr. Joel Kailia
Nova Scotia

Treatment of acute herpes zoster should begin within 48 hours or 72 hours of the rash onset. Studies have used durations of treatment from seven days up to 21 days, with little evidence that treatment beyond seven days provides additional benefit. Recommendations are generally to use treatment for seven days to 10 days. There is no information on using the healing of lesions as an indicator for altering the course of treatment. In general, for immunocompromised patients, many physicians would continue treatment until all lesions show evidence of healing and new lesions have stopped appearing.

Answered by:
Dr. Michael Libman

8. OC concerns

A patient's acne was resolved using the OC: cyproterone acetate and ethinyl estradiol. She went off of it because some concerns about it were published. Now trials of other OCs such as levonorgestrel and ethinyl estradiol have failed to deal with the acne. What now?

Question submitted by:
Dr. John Dawson
Ottawa, Ontario

Oral contraceptives are associated with a risk of thrombophlebitis.

Concerns raised regarding cyproterone acetate and ethinyl estradiol are isolated, due to the fact that this agent is not officially indicated as birth control despite a pharmacologic action that is the same as approved oral contraceptives. Some patients will see a greater suppression of androgen triggered acne with ethinyl estradiol are isolated vs other less androgen suppressing OCs. This patient could certainly consider reverting back to cyproterone acetate and ethinyl estradial, but should also continue recognizing the risks of all OCs. It should be remembered that coronary thrombosis, venous thrombosis and cerebrovascular accidents are more likely to occur in women who:

- are 35 years or over (par ticularly if they have used the contraceptive for > five years),
- are smokers,
- are obese,
- are hypertensive and
- have diabetes,
- hypercholesterolaemia or
- familial hyperlipoproteinaemia.

Of course, specific concerns regarding these agents in a particular case should be reviewed by the patient's family doctor, endocrinologist or gynecologist.

Answered by:
Dr. Scott Murray

SSRIs and breast feeding?

9.

Which SSRIs are safe to use in a breast feeding mother who does not want to harm her baby?

Question submitted by:
Dr. David Stryden
Sylvan Lake, Alberta

There are significant risks to both the mother and her baby from untreated depression post-partum. SSRIs are safe and effective drugs for use in this instance and the decision as to which medication to use should be dictated by the usual indicators such as patient preference and previous exposure response. Though subsequent serum levels in infants are safe for all medications in this class, Studies have indicated that sertraline and paroxetine have the lowest transfer rates via breastmilk

Answered by:
Dr. Trevor Prior

Studies have indicated that sertraline and paroxetine have the lowest transfer rates via breastmilk.

Asthma in Kids

10.

What age is reasonable to diagnose asthma in a child and what is the best test to diagnose it?

Question submitted by:
Dr. Brown
St. Catherines, ON

Asthma is a diagnosis that some people appear to rush to and some avoid making at all costs. Asthma should be considered as repetitive episodes of bronchial hyper-reactivity in response to stimuli, which in children is most commonly viral infection. Up to 30% of children wheeze in response to viral infections as infants and toddlers, and these children are most commonly considered to have reactive airway disease. When these episodes occur in a repetitive manner, the diagnosis of asthma should be considered. Generally, the diagnosis of asthma should be reserved for children above the age of three. The diagnosis is entirely clinical and although there are interesting developments in infant pulmonary function tests, these are not considered gold standard for diagnosis.

Answered by:
Dr. Michael Rieder

How serious is hay fever?

11.

Can a hay fever allergy be considered a serious illness? Please explain.

Question submitted by:
Dr. David Stryden
Sylvan Lake, Alberta

True hay fever is a hypersensitivity pneumonitis to moulds which contaminate damp hay. However, hay fever allergy is often loosely used to describe ragweed, pollen-induced allergic rhinoconjunctivitis. As with all types of pollen allergy, there are some associated complications when it is not adequately treated. These complications include sinusitis, otitis media and allergic asthma. Independent of these complications, allergic rhinitis causes a huge amount of morbidity due to poor restorative sleep leading to impaired daytime concentration at school and work, leading to lost productivity. The annual economic loss per employee, per year in the United States is estimated to be $593 US dollars for allergic rhinitis as compared to:

- $518 US for high stress,
- $277 US for migraine,
- $273 US for depression,
- $269 US for arthritis and rheumatism,
- $248 US for anxiety disorder,
- $181 US for respiratory infections,
- $105 US for hypertension or high blood pressure,
- $95 US for diabetes,
- $85 US for asthma and
- $40 US for coronary heart disease.[1]

Answered by:
Dr. Peter Vadas

References:
1. Lamb CE, Ratner PH, Johnson CE, et al: Economic impact of workplace productivity losses due to allergic rhinitis compared with select medical conditions in the US from an employer perspective. Curr Med Res Opin 2006; 22(6):203-10

Pain in the lactating breast

12.

Aside from mastitis, what causes pain in the lactating breast?

Question submitted by:
Dr. J. Thomas
Victoria, British Columbia

There are numerous causes of breast pain in lactating women. A blocked duct or breast abcess may mimic mastitis. Some lactation experts believe that breast pain may be caused by *Candida* infection in the ducts of the breast. For some women, let-down can be very uncomfortable. Nipple pain may be due to trauma secondary to a poor latch, eczema, or Raynaud's Phenomenon

Taking note of the location of pain, character and timing, in relation to breast-feeding is often helpful in making the diagnosis. Differentiating between a blocked duct, mastitis and a breast abscess can be more difficult. Systemic symptoms such as fever and malaise are not usually present with a blocked duct.

Answered by:
Dr. Susan Chamberlain

ENT concerns for children with Down syndrome

13.

What are some of the ear, nose, and throat concerns for children with Down syndrome?

Question submitted by:
Dr. Tara O'reilly
Edmonton, Alberta

Down syndrome is the most common of the chromosomal abnormality syndromes and result in some important head and neck manifestations

- Hypertelorism: a small nasal bridge and oblique palpebral fissures affecting 80% of those with Down syndrome
- Ears are small (with stenotic external canals). Conductive hearing loss occurs in 60% of patients, with a high incidence of otitis media, and sensorineural hearing loss occuring in 10% of patients
- Lips are broad and dry, creating furrows around the mouth. The tonsils are hypertrophied and not recessed in the fossae, thus patients are at a higher risk of obstructive sleep apnea
- The palate is narrow and a cleft lip/palate is occasionally seen
- Tongue is relatively large and protrudes from the mouth. Occasionally true macroglossia is present
- Gingivitis, periodontal disease and dental caries coexist. Microdontia, enamel hypoplasia and posterior crossbite are frequent
- Patients have a higher incidence of subglottic stenosis and atlantoaxial dislocation
- Articulation defects and dysrhythmic speech are associated with a low-pitched hoarse voice

Answered by:
Dr. Ted Tewfik

Conductive hearing loss occurs in 60% of patients, with a high incidence of otitis media, and sensorineural hearing loss occuring in 10% of patients.

When triglyceride levels do not respond to statins?

14.

What should be done when high triglyceride levels do not respond to statins?

Question submitted by:
Dr. Suzanne Johnson
Calgary, Alberta

It remains controversial whether there is an independent association between triglycerides and ischemic heart disease (IHD). The Working Group on Hypercholesterolemia no longer recommends a discrete target triglyceride level.[1] An optimal plasma triglyceride level should be less than 1.7 mmol/L.

Severe hypertriglyceridemia (> 10.0 mmol/L) should be treated since it is a risk factor for pancreatitis. Lifestyle changes should be tried first, such as:

- diet therapy,
- weight loss and
- restriction of refined carbohydrate and alcohol.

Patients with triglyceride levels of >6.0 mmol/L despite lifestyle changes deserve drug therapy. Preferred drug treatment is a fibric acid derivative or niacin. For patients with moderate hypertriglyceridemia, salmon oil together with statins may be useful in lowering triglyceride levels and achieving the target total cholesterol, which consists of HDL-C (TC/HDL) ratio.

Reference
1. Genest, J. Recommendations for the management of dyslipidemia and the prevention of cardiovascular disease: summary of the 2003 update. CMAJ 2003. 169(9): 921-4.

Answered by:
Dr. Chi-Ming Chow

The lifetime risk of developing active TB

15.

Can you comment on the lifetime risk of developing active TB if you have a positive first or second step TB skin test? What if you have been vaccinated in the past?

Question submitted by:
Dr. Sara Rudge
Burlington, Ontario

If your TB skin test (the Mantoux test is the current standard technique) is positive, you are assumed to have been infected with Mycobacterium tuberculosis in the past, with some chance of harbouring a latent infection which may reactivate in the future. It has been estimated that that there is about a 5% chance of reactivation in the five years following skin test conversion, with a further 5% chance over the remainder of one's lifetime. This risk may be higher in an immunocompromised individual, or someone taking immunosuppressive medication. Vaccination with *Bacille Calmette-Guérin (BCG)* likely provides some protection, although estimates of vaccine efficacy have been highly variable. In addition, BCG may cause the Mantoux test to become positive, even when there has never been any exposure to TB. A blood test to replace the Mantoux is available which appears not to become positive after BCG vaccination.

Answered by:
Dr. Michael Libman

Treatment for pityriasis rosea

16.

Is there any treatment for Pityriasis rosea?

Question submitted by:
Dr. David Stryden
Sylvan Lake, Alberta

Pityriasis rosea is a self limited viral induced exanthem. The majority of patients will have a benign course, resolving asymptomatically by six weeks and therefore, most people need no therapy other than reassurance. Occasionally, some cases will be very aggressive and uncomfortable. Oral prednisone is the standard therapy to give relief ,but likely does not actually shorten the course of the episode. Ultraviolet B can also be of help, as well as oral antihistamines for itch. Since the condition is associated with human herpesvirus (HHV) 6 and HHV-7, it has been suspected that systemic drugs directed against HHV may hasten recovery. In fact, a recent trial of acyclovir 800 mg five times q.d. showed more rapid clearing of this condition after 14 days.

Answered by:
Dr. Scott Murray

Obesity in children

17.

Why isn't BMI indicated in children as a measurement of child obesity?

Question submitted by:
Dr. Lee
North York, Ontario

The use of Body Mass Index (BMI) to evaluate obesity in adults has been standardized and is a useful tool in the management of obesity in adults. However, in children, there are age and gender variations that make BMI less useful as a predictor of body fatness. Use of a corrected BMI for age has been suggested. This is because the amount of fat varies with age in children and is also different between genders. The complexities of growth and development make the use of a simple BMI inappropriate for the assessment of body fatness. The finding of an abnormal BMI for age, mandates a more thorough evaluation, including evaluation of:

- skinfold,
- thickness,
- diet,
- amount of daily exercise and family history.

Answered by:
Dr. Michael Rieder

Children with milk allergies

18.

What would you recommend for a one-year-old child who seems to have developed an allergy to cows milk? Is soy milk safe?

Question submitted by:
Dr. E. Howard
Comox, British Colombia

An allergy to cow's milk is common in children with an estimated prevalence of about 2% to 5% in industrialized countries. The major allergens in cow's milk are proteins which can be transferred from the maternal diet into the breast milk of lactating women. The IgE-binding sites on cow's milk proteins are conformational epitopes which are broken down by gastric acid and digestive enzymes as the gut matures in childhood. However, in the immature gut, these conformational epitopes are absorbed intact into the bloodstream, leading to immediate hypersensitive reactions. As children age, they tend to outgrow their allergy, so that by the age of seven, about 85% will have lost this food allergy. Soy-based formulas seem to be an acceptable alternative to extensively hydrolyzed cow's milk formulas in allergic children. In a well-conducted Finnish study, there was no increased risk of soy or peanut allergy in milk-allergic children who were fed soy formula during the first two years of life.

Answered by:
Dr. Peter Vadas

Patients with abdominal aortic aneurysms

19.

When would you worry about a patient with an abdominal aortic aneurysm?

Question submitted by:
Dr. Smith
Toronto, Ontario

Abdominal aortic aneurysms (AAA) are silent killers. The latest Canadian Cancer Society's consensus conference on peripheral arterial disease recommends the screening of asymptomatic men between 65 years and 74 years[1]. Referral to a vascular specialist is recommended when the abdominal aorta reaches 4.5 cm in diameter.

Elective AAA repair is recommended for men with aneurysm > 5.5 cm and for women with aneurysm > 5.0 cm. The decision on whether or not to repair involves an assessment between the estimated risk of rupture compared to the expected operative mortality.

Open repair is likely to be recommmended for those at low risk, with a favourable anatomy and a surgeon with a low mortality rate. For patients at high-risk for open repair, conservative management or endovascular aneurysm repair can be considered if the anatomy is suitable.

Answered by:
Dr. Chi-Ming Chow

Reference
1. Abramson, BL, Lindsay T, et al: Society Consensus Conference: Peripheral arter ial disease - executive summary. Can J Cardiol 2005. 21(12):997-1006.