Consultant's Corner

Practical Answers To Your Everyday Questions

Constipation in children

1.

Please provide advice on the management of constipation in infants, toddlers and kids, with respect to specific medications, dosages and dietary measures.

Question submitted by:
Dr. Alnoor Keshavjee
Scarborough, Ontario

Therapy for constipation in infants and children should be individualized and should start with increasing the amount of fluid, fruit and vegetables in the diet. Usual pharmacological agents include: mineral oil compounds, such as Lansoyl™ and lactulose. The usual starting dose is one teaspoon to two teaspoons, once or twice a day, increasing as needed to ensure that the child has one to two soft stools a day. In the case of non-response, the dose should be increased. Therapy can usually be stopped several weeks after the child begins to produce regular soft stools.

Answered by:
Dr. Michael Rieder

Vaccines against cervical cancer

2.

How effective is the new vaccine against cervical cancer?

Question submitted by:
Dr. Janick Mason
Toronto, Ontario

There are currently two vaccines against human papillomavirus (HPV)—one is a quadrivalent vaccine against the HPV type 16 and type 18 (which account for 70% of cervical cancers) and type 6 and type 11 (which accounts for 90% of genital warts). The other new vaccine is a bivalent vaccine against type 16 and type 18.

Phase three trials indicate that the vaccines are highly effective against an HPV infection. Trials of the quadrivalent vaccine have shown that it can reduce the occurrence of type-specific cervical intraepithelial neoplasia (CIN)-1 to CIN-3 and adenocarcinoma *in situ* by 99% to 100%, after three years of follow-up. Any CIN was reduced by 94% to 95%. Results for the bivalent vaccine were similar. Studies of immunogenicity show persistence of almost 100% at 5.3 years of follow-up.

Answered by:
Dr. Susan Chamberlain

3. Pneumococcal vaccines—booster or not?

Are pneumoccal vaccines boosters or not? A specialist said it was a polysaccharide vaccine and that it was not necessary and would increase the risk of an allergic reaction to other boosters. Please explain.

Question submitted by:
Dr. Christine Szparaga
Toronto, Ontario

The standard 23-valent pneumococcal vaccine is a polysaccharide vaccine. These vaccines do not exhibit any type of "booster" response with repeat doses. In some experimental situations, repeat dosing may actually induce immune tolerance, with lower antibody levels. Because of this, no clinical trials with booster doses have been done and the practice is not routinely recommended. The only time that it is recommended is in certain high-risk populations, where a single "booster" is recommended. The new protein conjugated vaccine, which is only 7-valent and is currently only recommended for children, will probably, eventually replace the polysaccharide vaccines.

Answered by:
Dr. Michael Libman

4. Does an allergic reaction causing hives warrant an EpiPen®?

Do patients that just develop hives from peanuts, mixed nuts and seeds need an EpiPen®?

Question submitted by:
Dr. Catherine West
Vancouver, British Columbia

The question often arises as to how aggressive a clinician must be in treating patients with an allergy to peanuts or tree nuts, especially if the initial reaction is mild. There are some recognized risk factors that predispose patients to severe or life-threatening anaphylaxis. These risk factors include:

- a history of severe anaphylaxis,
- the presence of asthma (particularly if the asthma is not optimally controlled),
- concomitant use of:
  - ß-blockers:
  - angiotensin-converting enzyme inhibitors,
  - acetylsalicylic acid,
  - non-steroidal anti-inflammatory drugs,
  - alcohol, or
  - exercise.

Significantly, a study by Bock *et al.* in 2000 followed 83 peanut allergic children over five years and tracked the number and severity of reactions resulting from accidental peanut exposure. They found that regardless of the nature of the children's initial reaction, the majority with subsequent reactions (52%, 31 of 60 subjects) experienced potentially life-threatening symptoms.

Symptoms experienced during subsequent reactions to peanut exposure were not consistent with symptoms reported during initial reactions. Based on these findings, I think that it is prudent to provide all individuals with peanut and tree nut allergies an epinephrine autoinjector (*i.e.,* Twinject® EpiPen®). Steps should also be taken to minimize other modifiable risk factors.

Answered by:
Dr. Peter Vadas

5. Corneal abrasions

In the May issue of *The Canadian Journal of CME*, Dr. Banks answered a question about corneal erosions (bandage contact lens, moxifloxacin, diclofenac and tetracaine drops). Can this also be considered as treatment for traumatic corneal abrasions? Can tetracaine drops only be used if a corneal bandage has been applied?

Question submitted by:
Dr. Jo Hauser

This is an excellent question. Because most ophthalmologists have their own protocol, using this combination of therapy is my personal bias. Traumatic corneal abrasions can be treated with this combination therapy and the bandage contact lens reigns supreme as the treatment modality of choice when supplemented by medication.

Topical tetracaine drops, or any other form of anesthetic, such as Welder's Eye Ease, have an immediate effect of relieving the patient's agony. Unfortunately, tachyphylaxis occurs with topical anesthetics and they retard the rate of corneal re-epithelialization.

It is bad clinical practice (and extremely unsafe) to give a patient unrestricted use of topical anesthetics when the cornea is not protected by a contact lens. Inevitably, they will overuse the medication which will often seriously retard the rate that the abrasion heals. Furthermore, they can aggravate the abrasion by rubbing their anesthetized or partially anesthetized eye (an iatrogenic neurotrophic cornea).

Remember that the bandage contact lens does not significantly speed up the process of re-epithelialization. It merely makes the patient much more comfortable without the use of any anesthetizing agents or heavy sedation.

If you are unable to use a bandage contact lens, send your patient to someone who can. Better still, find someone who will train you in this simple, inexpensive, but very effective intervention. Oral, or even intravenous sedation is a better choice than repeated topical anesthetic applications.

Answered by:
Dr. Malcolm Banks

Diagnosing menopause in a patient on an OC

6.

Is there a reliable way to diagnose menopause in a sexually active perimenopausal woman who is using an OC for birth control?

Question submitted by:
Dr. T Barbetta
Aurora, Ontario

The easiest way to diagnose menopause in a patient using the oral contraceptive pill (OC) is to test follicle-stimulating hormone (FSH) and estradiol at the end of the pill-free interval. If FSH is elevated and estradiol is low, then the patient is likely menopausal. I usually initiate this testing at the age of 50 (the average age of menopause is 51) and continue it yearly until the patient is determined to be menopausal.

Answered by:
Dr. Susan Chamberlain

Are triglycerides a risk factor for IHD?

7.

Are elevated triglycerides an independent risk factor for IHD and does pharmacotherapy—to lower the levels—translate into clinical benefit and lowering of this risk?

Question submitted by:
Dr. Lindsay Kennedy
Toronto, Ontario

It remains controversial if there is an independent association between triglycerides and ischemic heart disease (IHD). Hypertriglyceridemia tends to be associated with other abnormalities that predispose the individual to atherosclerosis, including:

1. low HDL-cholesterol (HDL-C) levels,
2. presence of small dense LDL-C particles,
3. insulin resistance,
4. increase in coagulability and viscosity and
5. metabolic syndrome.

The Working Group on Hypercholesterolemia no longer recommends a discrete target triglyceride level.[1]

An optimal plasma triglyceride level should be < 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, these include:

- Diet therapy
- Weight loss
- Restriction of refined carbohydrates
- Restriction of alcohol

Patients with triglyceride levels > 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 to HDL-C ratio.

Answered by:
Dr. Chi-Ming Chow

Reference
1. Genest J, Frohlich J, Foder G, et al: Recommendations for the management of dyslipidemia and the prevention of cardiovascular disease: Summary of the 2003 update. CMAJ 2003; 169(9):921-4.

Fifth disease recommendations for pregnant teachers

8.

What are the recommendations regarding Fifth disease in schools for pregnant teachers?

Question submitted by:
Dr. Jacqueline Mitchi
Ste-Foy, Quebec

This is an area of some controversy. Women exposed to children at home, or at work, are at increased risk of infection with Parvovirus B19 (Fifth disease). However, school outbreaks usually indicate a wider spread in the community (including inapparent infection) with associated risk for exposure. In view of the high prevalence of a parvovirus B19 infection, the low incidence of ill effects on the fetus and the slight decrease in risk of exposure, some recommend (*i.e.,* American Academy of Pediatrics) that pregnant women not be routinely excluded from work when there is an infection occuring. Other occupational health authorities recommend exclusion of those found to be non-immune, for varying periods of time.

Answered by:
Dr. Michael Libman

Treating eczema on a five-year-old

9.

What is the best way to treat eczema that does not sting on a five-year-old?

Question submitted by:
Dr. Jackson Lin
Barrie, Ontario

Physicians will often be frustrated when atopic patients protest to the application of therapeutic medications. In fact, some of them can immediately irritate the skin. The calcineurin inhibitors, tacrolimus and pimecrolimus frequently sting the skin with a "hot pepper" sensation. This can settle down after a few days of application.

Creams with acidic components, such as urea, lactic acid and salicylic acid can also be uncomfortable, especially on acute eczema. Some children find that almost any cream formulation containing steroids sting. This is likely due to the preservatives (such as acetic acid).

When confronted with an upset child (and frustrated parent), switching to an ointment-base will usually be bettter tolerated, even on the most sensitive skin.

Answered by:
Dr. Scott Murray

10. Which p.o. iron is better tolerated?

Iron taken orally is so often not tolerated. Is there one type of p.o. iron which is better tolerated?

Question submitted by:
Dr. C. Cunningham
Vernon, British Columbia

The intolerance of oral iron is usually gastrointestinal, with a range of symptoms, from epigastric discomfort or irritation, to constipation, or diarrhea. In my experience, the formulation does not seem to matter, though that should not dissuade physicians and patients from experimenting with different formulations and dosing to find a workable solution.

I would recommend limiting the choice of formulations to ferrous sulfate, fumarate, or gluconate, as others probably do not have as much bioavailable elemental iron in them as these three.

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

11. Lipid control in patients who cannot tolerate statin therapy

What are your recommendations for lipid control in patients who do not tolerate statin therapy due to muscle pain?

Question submitted by:
Dr. Sarah Varner
Toronto, Ontario

The incidence of statin-related myopathy is low (0.1% to 0.2% over a period of eight weeks to 52 weeks). However, the incidence of patients who develop muscle pain without CK elevation is higher (approximately 2%). Patients who are at risk of developing myopathies include:

1) Elderly patients (particularly female)
2) High-dose statin users
3) Potentially interacting medications (*e.g.,* gemfibrozil and cyclosporin)
4) Renal or hepatic dysfunction

When a statin-treated patient complains of having muscle pain, it is important to rule out other causes of myopathy, such as recent strenuous activity or hypothyroidism, which predisposes patients to statin myopathy. Stop the statin immediately if CK is > 10 times the upper limit of normal. If the patient is symptomatic, discontinue the statin until the patient is totally asymptomatic and restart with a different statin at a low dose. Then, gradually increase the statin until the equivalent LDL-cholesterol (LDL-C) reduction is achieved.

Alternatively, using the combination of ezetimibe, with a low-dose statin, has been shown to produce the similar LDL-C reduction as a high-dose statin alone. Coenzyme Q10 supplementation has also been shown to be helpful in some patients with statin myopathy; however, more data is needed for this supplementation.

Answered by:
Dr. Chi-Ming Chow

Treatment of *molluscum contagiosum*

12.

Please discuss the treatment of extensive *molluscum contagiosum*.

Question submitted by:
Dr. Trevor Gin
Delta, British Columbia

Treatment options for *molluscum contagiosum* usually range from:

- expectant waiting,
- curettage,
- topical irritants, such as salicylic acid,
- cryotherapy,
- cantharidin and
- some recent reports of success with imiquimod.

For spontaneous resolution, I often opt for expectant waiting, or no active therapy. If active treatment is desired, I will use cryotherapy, or cantharidin to a few lesions at a time. I do this to keep the irritation to a minimum. If the response is acceptable, wider areas can be addressed at future appointments as tolerated.

Answered by:
Dr. Scott Murray

Solutions to joint problems caused by aging

13.

A close companion (aged 50 plus) has arthritis of the proximal joint of the large toe. At times, it inhibits walking and sports. Orthotics help, but they are not a complete solution. A new surgical joint will lay her up for a year, with minimal chance of any real improvement. Are there any solutions to this and of her joint problems caused by aging?

Question submitted by:
Dr. Colin Leech-Porter,
Vancouver, British Columbia

Every step taken in life requires a kick-off through the great toe metatarsophalangeal joint. The lifelong stresses applied to this joint contribute to the development of peripheral osteoarthritis. In the absence of any known preventative measures, management is symptomatic. As weight bearing activity may cause pain, softening the force of step impact may be achieved by the use of shoes with well-cushioned soles, or soft inner soles with metatarsal domes.

Topical application of an anti-inflammatory liquid or cream, may also be helpful. Tophaceous deposit of uric acid in the joint and hydroxyapatite deposition in the para-articular tissues may also be a cause of pain in this joint. Severe symptoms warrant a surgical opinion.

Answered by:
Dr. Mary-Ann Fitzcharles

Want to know more about metatarsophalangeal joint? Read about it in this month's Time Out (pg.47)

Probing blocked tear ducts

14.

At what age should blocked tear ducts be surgically probed?

Question submitted by:
Dr. P. Mucalov
Queensville, Ontario

Blocked tear ducts should be surgically probed at the age of one year in uncomplicated cases of epiphora. The rationale for this delay is based on the fact that approximately 95% of all uncomplicated infantile epiphora clears spontaneously by the age of 12 months. A lacrimal sac massage, three times daily, with a cotton tipped swab may have some benefit and it treats both parent and child. Secondly, the risk of pediatric anesthesia in infants considerably outweighs any harm from epiphora. A five-month-old child recently died from anesthetic complications during a probing in Canada.

Recurrent bouts of conjunctivitis should be managed by frequent hygiene, rather than by systemic or topical antibiotics. The latter are generally ineffective and use of the former is controversial.

Some pediatric ophthalmologists perform in-office probing of neonates under topical anesthesia with varying degrees of success. This can best be compared to neonatal circumcision without anesthesia.

In complicated cases of epiphora, with dacryocystitis or abscesses of the sac, more aggressive treatment is indicated. This should be deferred to ophthalmologists with access to dedicated pediatric anesthetists.

Probing is performed using metal instruments often made of silver. However, in recent years, balloon dilatation and the use of silicone tubes with prolene leaders, have provided a less traumatic, but equally effective way of opening the lacrimal drainage system. Approximately 95% (of the remaining 5% who do not clear spontaneously) are successfully treated in this way.

Answered by:
Dr. Malcolm Banks

Is HbA1c a screening tool for diabetes?

15.

Should HbA1c be used as a screening tool for diabetes mellitus?

Question submitted by:
Dr. Grady Ares
Calgary, Alberta

At this time, HbA1c has not been validated as a screening test for the diagnosis of diabetes mellitus. Patients with a mild degree of dysglycemia who may have diabetes based on fasting and a two hour oral glucose tolerance test, blood glucose levels, may have normal levels of HbA1c, leading to false negative results. Rarely, patients with hemoglobinopathies may have abnormal HbA1c levels in the presence of normal blood glucose levels.

Answered by:
Hasnain Khandwala

Treating children with *H. pylori*

16.

A nine-year-old female patient has tested positive for *Helicobacter pylori,* AB > 15 U/ML. What is the possible treatment option for her and other children?

Question submitted by:
Dr. Samir Abouna
Mississauga, Ontario

In the case of a child with an ulcer testing positive for *H. pylori*, the usual therapy at nine years of age would be 250 mg clarithromycin, b.i.d., as well as 500 mg amoxicillin, b.i.d., for 10 days to 14 days along with 10 mg omeprazole, b.i.d., for two months. This regimen is associated with a high response rate.

In the absence of an ulcer, but with symptoms, such as severe abdominal pain and a positive test for *H. pylori*, the same regimen can be used, but it has been observed that failure rates are higher.

Answered by:
Dr. Michael Rieder

Treating thrombosis of the IJV

17.

If conservative treatment has failed, what is the best way to treat thrombosis of the internal jugular vein?

Question submitted by:
Dr. S. Miller
Edmonton, Alberta

The etiology of internal jugular vein (IJV) thrombosis, could be divided in three types:

- infectious,
- traumatic, or
- due to coagulation disorders.

Lemierre syndrome or septic thrombophlebitis of the IJV, is a potentially life-threatening complication. This condition may result from oropharyngeal infection, central venous catheterization and intravenous drug abuse. Immunocompromised patients and individuals with systemic disease are at higher risk of developing the syndrome.

Conservative treatment with intravenous heparin and appropriate antibiotherapy should be started as soon as the diagnosis is made.

In rare instances, bilateral thrombosis of the IJV occurs and is associated with elevated intracranial pressure. If medical therapy does not alleviate the condition, an intravascular stent could be placed in the IJV. Nowadays, to treat IJV thrombosis, ligation of the IJV is rarely necessary.

Answered by:
Dr. Ted Tewfik

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