



1.

Kids with croup

Is it appropriate to treat children with croup in an outpatient setting with a single dose of oral dexamethasone? What formulation is best tolerated by children from a taste point of view?

Question submitted by:
Laurie Martz, MD, CCFP
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Supported by evidence from over 20 randomized, controlled trials and two meta-analyses, steroids have been the treatment of choice for moderate and severe croup for many years.

In the outpatient setting, however, most children with croup present with mild symptoms (no stridor or stridor only with agitation and no-to-minimal chest wall retractions).

In a recent Canadian study of 720 children with mild croup, children receiving a single dose of oral dexamethasone derived clear benefits from treatment. They were half as likely to return for medical care due to croup, had more rapid resolution of symptoms and lost less sleep during the illness. In addition, there were small, but significant savings to both the health-care system and to families.¹

The intravenous formulation of dexamethasone (0.6 mg/kg) given orally, followed by a small drink of juice or a popsicle, is best tolerated by children. Certain pharmacies may make a suspension if the intravenous formulation is not available.

This month—10 Answers:

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9. Is memantine beneficial for dementia?
10. What's the best food allergy drug?

Reference

1. Bjornson C, Klassen T, Williamson J, *et al.*: A randomized trial of a single dose of oral dexamethasone for mild croup. *N Engl J Med* 2004; 351(13):1306-13.

Answered by:
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2.

Patching up corneal abrasions

Is there a patch or pain control to apply to corneal abrasions? What about the concern regarding the promotion of pseudomonas infection with an eye patch?

Question submitted by:
Adam Kayemi, MD
Toronto, Ontario

Recent evidence suggests eye-patching is not recommended for most corneal abrasions. Studies have shown patching does not increase the rate of epithelial healing; rather, patches can create a moist environment suitable for the growth of infectious organisms.

Abrasions due to wearing contact lenses should not be patched, as they are at increased risk of pseudomonas infection.

Initial treatment for corneal abrasions should consist of foreign body removal (if present) and topical antibiotics (*i.e.*, 0.3% ciprofloxacin, gentamycin or tobramycin eye ointment three to four times a day). Ointments have antipseudomonal coverage and lubricate the eye better than eye drops.

Also, consider pain control with topical non-steroidal anti-inflammatory drugs (*i.e.*, 0.5% ketorolac or 0.1% diclofenac one drop, four times daily) or oral analgesics. Topical mydriatics may reduce the pain associated with ciliary muscle spasm.

Most corneal abrasions heal in 24 to 72 hours. Contact lenses should be temporarily discontinued and patients should be re-evaluated daily until the abrasion has healed.

An ophthalmology consultation may be required for non-improving abrasions.

Answered by:
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3.

Diabetes and albuminuria

How do you explain a patient with diet-controlled diabetes developing albuminuria, diuretic-resistant pedal edema and pleural effusions? What is the best treatment for patients with such problems?

Question submitted by:
Gebrehiwot Abraham, MD,
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Kingston, Ontario

The patient has Type 2 diabetes and may have nephrotic syndrome secondary to diabetic nephropathy, particularly if there has been:

- a slowly progressive rise in the urinary protein over the years > 3.5 g a day,
- associated renal insufficiency,
- hypertension and
- retinopathy.

There is a possibility, however, this patient could have glomerulonephritis and should be seen by a nephrologist.

In the absence of nephrotic-range proteinuria, conditions such as heart or liver disease must be considered.

Presumably, the patient is taking an angiotensin receptor blocker or an angiotensin-converting enzyme inhibitor. A higher dose loop diuretic, the addition of a distal diuretic (such as metolazone), and dietary salt restriction are important.

Answered by:
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4.

Optimum opiate treatment**What opiates are best for pain treatment?**

Question submitted by:
Frank Cashman, MD, FRCPC
Toronto, Ontario

Contrary to expectations, there is little evidence to support the use of one opioid over another for pain management. They all reduce pain and have similar side-effect profiles, including the development of tolerance.

Experts in pain management prefer to treat patients with potent, long-acting opioids.

Clinical wisdom suggests using long-acting opioids reduces pill-taking behaviour that can reinforce pain behaviours. Regardless of the opioid selected, however, the goal of treatment should be to use the least amount of opioid necessary to reduce pain in order to improve the patient's quality of life.

Answered by:
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HRT and hot flashes

5.

A post-menopausal female is experiencing hot flashes after stopping HRT (she was on HRT for over four years). She has concerns about breast cancer and heart disease risks. What is the best treatment for her now?

Question submitted by:
G. Paul Stephan, MD
Toronto, Ontario

There are several therapeutic options to deal with this problem:

1. Do not stop hormone replacement therapy (HRT) abruptly. Use a tapered approach with diminishing HRT dosage.

Advise the patient flashes will continue and peak about two months after HRT is stopped. Counselling and advice may be sufficient to tide the patient over this period.

2. Avoid hot-flash triggers, including cigarette smoking, caffeine, spicy food and alcohol.

Keep the bedroom temperature cool.

Greater physical activity may also lessen the flashes.

3. Non-prescription treatment options for mild flashes include black cohosh, isoflavones and vitamin E. However, long-term data for effectiveness and safety are lacking in these products. They are usually not effective for moderate-to-severe hot flashes.

4. Other than hormones. prescription treatment options for hot flashes include antidepressants, such as venlafaxine, fluoxetine and paroxetine, and anticonvulsants, such as gabapentin.

Selective serotonin reuptake inhibitors block the 5-hydroxytryptamine receptor involved in thermoregulation and have been used successfully to relieve flashes.

Answered by:
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6.

Can obese children be treated with orlistat?

Is it safe to use orlistat in obese children even though it is not recommended?

Question submitted by:
Mohammed M. Elahi, MD, CCFP
Toronto, Ontario

Although a number of studies have been published examining the efficacy of orlistat in adults, no published, randomized, control trials are available to assess the safety and efficacy of this drug in obese youth.

Two six-month trials in children (n=11)¹ and adolescents (n=20)² have been published. These both suggest orlistat, in conjunction with a comprehensive behavioural program, may result in weight loss, decreased fat mass and improvement in obesity-related comorbidities in youth. However, the true benefit is yet to be measured in placebo-controlled trials.

As in studies of adults, the primary side-effects relate to the gastrointestinal (GI) tract, with many subjects experiencing diarrhea and flatulence. Those with the greatest GI symptoms tend to be those who have been unable to reduce their fat intake.¹

Furthermore, several studies suggest deficiencies of fat-soluble vitamins, particularly vitamins D and E, may develop with orlistat use, even with multivitamin supplementation.^{1,3}

No data in the absence of behavioural intervention is available.

Results from an ongoing double-blind, placebo-controlled trial of orlistat in adolescents will provide further information regarding relatively short-term safety and efficacy.

References

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3. McDuffie JR, Calis KA, Booth SL, *et al.*: Effects of orlistat on fat-soluble vitamins in obese adolescents. *Pharmacotherapy* 2002; 22(7):814-22.

Answered by:
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7.

Discussing living wills

How do you approach a living will discussion in your office?

Question submitted by:
Gary Barrs, MD
Verdun, Quebec

There is a general expectation among the public that the physician needs to initiate the "living will" discussion. This can be easily done at appropriate visits to the office (*i.e.*, the annual health exam, following a diagnosis of a serious illness) or perhaps following the death of a loved one.

Older patients are generally quite receptive to discussing these issues, as many have fears they may be kept alive on "machines" for extended periods of time, long after any expectation of recovery has disappeared.

I usually start by asking patients if they have ever heard of "living wills" and whether they have an interest in discussing the topic. Most, in fact, are interested and after a short introduction to the topic, I provide reading materials, such as those provided by the Alzheimer Society of Canada or senior's agencies.

I also schedule a followup visit to discuss the issue further (ideally with their "significant other"). This often leads to very fruitful dialogue and sometimes to a formal document.

My experience, and that of others who have done work in this area, is energy is best focused on encouraging an open discussion between patient and spouse or family members, rather than on constructing a document.

Answered by:
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8.

Antipsychotics and antidepressants

How do the atypical antipsychotics work as an augmentation strategy for antidepressants?

Question submitted by:
Ivan Filanti, MD
Medicine Hat, Alberta

There is growing interest in the use of atypical antipsychotics beyond their original indications, including combining them with antidepressants in treatment-resistant depression.

In Canada, antipsychotics include olanzapine, seroquel and risperidone. Whether these medications act as augmenting agents in the classic sense is not yet clear.

Since depression severity is usually expressed using a composite scale, one must take into consideration the sedative and anxiolytic effects of the atypical antipsychotic medications in lowering

depression scores. Dosages tend to be lower than those used for a primary antipsychotic effect, but regardless of the dose, it is important to counsel patients and monitor them for weight gain and potential lipid dysregulation.

Answered by:
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9.

Is memantine beneficial for dementia?

What are the potential benefits of memantine for treatment of dementia and how should it be used once it becomes licensed in Canada?

Question submitted by:
Linda Lee, MD, CCFP
Kitchener, Ontario

In several randomized controlled trials involving patients with moderate-to-severe Alzheimer's disease, use of memantine, by itself or in addition to a cholinesterase inhibitor, leads to functional improvement and reduces care dependence.

A starting dose of 5 mg daily and titrating the dose weekly up to 10 mg twice a day is suggested.

It is a well-tolerated medication, even compared to a placebo. Potential side-effects are mild dizziness, headache, constipation and confusion.

Answered by:
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10.

What's the best food allergy drug?

What is a good food allergy drug to carry when going to restaurants? I heard at a recent lecture that diphenhydramine is not a good choice.

Question submitted by:
Irene D'Souza, MD
Willowdale, Ontario

From one point of view, if you have food allergies, there is no good antihistamine to take with you when going to restaurants. You should always carry an adrenaline syringe or an epinephrine injection, as these would be the most essential medications to have if you suffer a significant reaction.

However, if you also need an antihistamine, cetirizine, fexofenadine or desloratadine are probably the best. All are absorbed more rapidly than diphenhydramine.

If you have trouble swallowing pills, an alternative is loratidine in its sublingual formulation.

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