Answers to your questions from our medical experts

1. Treatment for Post-Nasal Drip

What is the best treatment for post-nasal drip? What are its causes and remedies?

Submitted by: Paul Stephan, MD, Scarborough, Ontario

Post-nasal drip is an awareness of fluid (mucus) passing down the back of the nose. It is normal for mucus to be produced in the sinuses and nasal cavity and to track down into the oropharynx, where it is then swallowed. Nevertheless, sometimes the volume of mucus is increased to the point where the patient becomes aware. There are a number of causes of increase in post-nasal drip including sinusitis, allergy and acid reflux. Commonly, patients present with a sensation of increased mucus swallowing, constant throat clearing, a tickling or sore throat. A thorough history taken from the patient should include allergies (either seasonal or perennial), sinus pain or headaches or any symptoms associated with acid reflux. Examination of the patient should include the nasal cavity, oral cavity, oropharynx and larynx. Positive findings include green or yellow mucus, either within the nose or in the oropharynx (chronic sinusitis), cobblestone appearance of the oropharyngeal mucosa, edematous mucosa within the nasal cavity (allergy) or erythema of the larynx (reflux). Treatment depends on the diagnosis. For chronic sinusitis, broad-spectrum antibiotics are the treatment of choice. For patients with an allergic etiology, avoidance of the allergen and anti-histamines are beneficial. Patients suffering from reflux benefit from losing weight, propping the head-end of the bed up, avoiding alcohol and caffeine and the addition of anti-acid medication if non-medical treatments fail. However, irrespective of diagnosis, most patients benefit from stopping smoking and nasal douching to improve nasal hygiene.

Answered by: Dr. Emma Barker; and Dr. Jonathan Irish

2. Antibiotics for Pregnant Women

A pregnant woman (first trimester) had *E. Coli* cystitis. She is allergic to penicillin and sulfa. Which antibiotic would be safe to use?

Submitted by: Trevor Gin, MD, Delta, British Columbia

Nitrofurantoin is an excellent therapy in this situation. It is indicated for the treatment of uncomplicated *E. Coli* infections of the urinary tract and is not cross reactive with penicillin or sulfa for allergies. It is also safe in the first trimester. The recommended therapy is 100 mg p.o. b.i.d. for seven days with a repeat urine culture with sensitivities after seven days of no therapy. If the infection persists, therapy should be re-evaluated.

Resource
1. Compendium of Pharmaceuticals and Specialties 2007.

Answered by: Dr. Victoria Davis

3. Methotrimeprazine as a Sleeping Pill

What do you think about using methotrimeprazine 5 mg as a sleeping pill?

Submitted by: Michael Lauzon, MD, Deux Montagnes, Quebec

Methotrimeprazine is a phenothiazine neuroleptic with strong sedating, anti-histaminic, anticholinergic and hypotensive effects. It is indicated in the treatment of psychotic disturbances such as schizophrenia and mania and conditions associated with severe anxiety and agitation, including some personality disorders. It is also used as an analgesic in pain due to cancer and neuralgias as well as a potentiator of anesthetics in general anesthesia. It is sometimes used for insomnia but this is not recommended due to its anticholinergic and hypotensive effects, as well as its potential to cause tardive dyskinesia in some patients after prolonged use. Safer drugs such as zopiclone 5 mg to 7.5 mg q.h.s p.o. or trazodone 50 mg to 150 mg q.h.s p.o. are more appropriate to use for the management of insomnia. Methotrimeprazine should be used in the management of insomnia only as a last resort, after all other sleeping aids have failed and only for a short period to avoid potential serious side-effects.

Answered by: Dr. Hany Bissada

4. Ciclopirox and Onychomycosis

Is ciclopirox ever a useful treatment for onychomycosis?

Submitted by: G. Baran, MD, Kingston, Ontario

Ciclopirox olamine (Loprox cream, Penlac® Nail Lacquer) is an antifungal agent that is active against dermatophytes and yeasts. Ciclopirox olamine 8% nail lacquer, the only topical agent approved for treating onychomycosis, is applied nightly for one week then removed with alcohol weekly and repeated. Treatment requires prolonged daily use for nine to 12 months. The long treatment period is due to minimal penetration of the drug into the nail and the slow growth of toenails. It is generally well-tolerated and extremely safe. Only rarely is there local burning or itch during application. Also, patients should be warned not to apply coloured nail polish when using ciclopirox nail lacquer as nails can be permanently stained. With meticulous, prolonged use, cure rates are roughly 30%.

Systemic antifungal agents (*e.g.*, terbinafine, itraconazole) are much more effective, with cure rates from 60% to 80% with only three to four months of treatment. However, systemic antifungals require careful use. Some are contraindicated in patients with heart, liver and kidney disease, require close monitoring with regular blood tests and have a multitude of potentially serious drug interactions. Topical ciclopirox nail lacquer is a good option for patients in whom systemic antifungals are contraindicated or do not wish systemic treatments and their possible side-effects.

Answered by: Dr. John Kraft; and Dr. Charles Lynde

5. Treatment of Diabetes in Older Children

What would be the best pharmaceutical treatment for Type 2 diabetes in older children?

Submitted by: Daniel DesRoches, MD, Gatineau, Quebec

Treatment for Type 2 diabetes in all age groups should be individualized to the treatments that best suit that particular individual. A multidisciplinary approach with lifestyle adjustments should be done with all children with Type 2 diabetes. Unfortunately, there are very few clinical trials done in children. Adult treatment principles likely can be used but are untested. Metformin likely is the medication of first choice in many and insulin also has been used. Otherwise there is only limited data with other medications.

Answered by: Dr. Vincent Woo

6. Screening Men for Osteoporosis

Do you feel that all men > 55-years-of-age should be screened for osteoporosis?

Submitted by: E. Franczak, MD, Scarborough, Ontario

While osteoporosis is not as common in men as it is in women, it is still present and problematic, particularly > 65-years-of-age as testosterone begins to decrease. In fact, the mortality from osteoporosis related vertebral fractures and hip fractures in men appears greater than that of women. Therefore, it is important to screen men as well as women for osteoporosis. In the 2002 Canadian osteoporosis guidelines, the recommendation is to screen all men > 65-years-of-age, given that it is in this population that the morbidity from fracture is at its highest. Other groups, such as the American College of Rheumatology have still not come to a consensus with regards to screening men for osteoporosis.

We feel that it is reasonable to screen after age 65 according to the Canadian recommendation, if there are no risk factors (*i.e.*, androgen insensitivity, depleted testosterone, corticosteroid use, fragility fractures, endocrine causes). If a risk factor is present, then screening should occur earlier.

Resource
1. Brown, JP, Josse, RG: 2002 Clinical Practice Guidelines for the Diagnosis and Management of Osteoporosis in Canada. CMAJ 2002; 167(10 Suppl):S1-34.

Answered by: Dr. Michael Starr

7. Choosing a Statin for Hypercholesterolemia

How do you pick which statin to use in treating hypercholesterolemia?

Submitted by: Tat-Kwan Wong, MD, Downsview, Ontario

There are currently six statins available in Canada:

- lovastatin,
- fluvastatin,
- pravastatin,
- simvastatin,
- atorvastatin and
- rosuvastatin.

Statins are very effective drugs for lowering LDL-C and all of the statins have been shown in many studies to decrease MI rates and improve survival. The choice of statin is often based on the physician's familiarity with one or two of the drugs in the statin class. However, there are a few differences to consider when deciding which statin to prescribe:

- Rosuvastatin, atorvastatin and simvastatin cause the greatest percentage change in LDL-C and are preferred in patients who require > 35% reduction in LDL-C to achieve their target
- Rosuvastatin and simvastatin are the most effective at increasing HDL-C
- Rosuvastatin and atorvastain are the most effective at decreasing triglycerides
- Atorvastatin and fluvastatin do not require dose adjustment in patients with renal dysfunction and are preferred in patients with severe renal impairment
- A hydrophilic statin (pravastatin or rosuvastatin) at a low dose is probably the best choice for patients with chronic liver disease and increased CV risk
- Fewer pharmacokinetic drug interactions are likely to occur with pravastatin, fluvastatin and rosuvastatin because they are not metabolized through the CYP3A4. These statins are also less likely to accumulate in patients who eat grapefruit

There is no compelling evidence that the adverse event profile differs significantly among statins. However, pravastatin and fluvastatin may be less likely to cause muscle toxicity than other statins because of fewer drug interactions.[1]

Reference

1. Graham DJ, Staffa JA, Shatin D, et al: Incidence of Hospitalized Rhabdomyolysis in Patients Treated with Lipid-Lowering Drugs. JAMA 2004; 292(21):2585-90.

Answered by: Dr. Bibiana Cujec

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8. What Age to Start Mammograms

How soon should we start mammograms if patients have a family history? Age 30, 40, 50?

Submitted by: Michael Manjos, MD, Jordan Station, Ontario

This largely depends upon the extent of the family history. Among women < 40-years-of-age, a woman with two or more first-degree relatives with premenopausal or bilateral breast cancer is at particularly high risk and should be referred for genetic counselling and assessment for hereditary cancer. Likewise, a woman with a sister or mother with bilateral breast cancer would be at four-fold risk of breast cancer, if the case were postmenopausal, or nine-fold if the case were premenopausal. This person would be at even higher risk if, in addition to the family history, she met any of the following criteria:

- a family history of ovarian cancer or male breast cancer and/or
- Ashkenazi Jewish heritage.

These women may be candidates for genetic testing and specialized surveillance programs.

Otherwise, FPs may wish to refer women < 40-years-of-age with a strong family history of breast cancer (*i.e.*, two or more family members) to be screened. Women aged 40 and over are eligible for mammography screening every one to two years even in the absence of a family history. In the setting of a family history, annual mammography would be preferred particularly between ages 40 to 49 years.

Answered by: Dr. Sharlene Gill

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9. Causes of Bronchitis

Is bronchitis usually viral? When would you blame bacterial causes and what is the best mode of management in young adults?

Submitted by: I. D'Souza, MD, Willowdale, Ontario

Acute bronchitis is a clinical syndrome characterized by increased cough, sputum and dyspnea. It is typically associated with symptoms of a common cold such as sore throat, fever, nasal discharge and congestion. Most episodes of acute bronchitis are viral. However, in individuals with underlying chronic obstructive pulmonary disease (COPD), acute exacerbations may be associated with bacterial infection.[1,2] In general terms, treatment for acute bronchitis in young adults without underlying COPD is supportive. However, individuals with COPD experiencing symptoms of an acute exacerbation are most likely to benefit from treatment with an antibiotic if they have a change in their usual sputum colour and volume accompanying an increase in baseline dyspnea.[1,2]

References
1. O'Donnell DE, Aaron S, Bourbeau J, et al: Canadian Thoracic Society Recommendations for Management of Chronic Obstructive Pulmonary Disease—2007 Update. Can Respir J 2007; 14(Suppl B):5B-32B.
2. Balter MS, La Forge J, Low DE, et al: Canadian Guidelines for the Management of Acute Exacerbations of Chronic Bronchitis: Executive Summary. Can Respir J 2003; 10(5):248-58.

Answered by: Dr. Paul Hernandez

10. Lipodermatosclerosis in Venous Stasis Disease

Can you tell me about lipodermatosclerosis in venous stasis disease?

Submitted by: Nathalie Bourget, MD, St-Henri-De-Levis, Quebec

Lipodermatosclerosis is a result of chronic venous insufficiency. There are two forms: acute and chronic. Chronic lipodermatosclerosis presents with indurated and frequently hyperpigmented skin over the medial aspect of the leg. It is usually non-painful and non-tender. In chronic lipodermatosclerosis, there is subcutaneous fibrosis and scarring leading to bound-down thickening especially in the mid portion of the leg giving the leg an "inverted champagne bottle" appearance. Ulcers frequently develop in lipodermatosclerotic skin.

Acute lipodermatosclerosis presents with red or purplish skin over the medial aspect of the leg. It is always tender and indurated. Therefore, it is typically confused with cellulitis or phlebitis.

The best treatment for chronic lipodermatosclerosis is leg compress. Stanozolol, an anabolic steroid with fibrinolytic activity, has also been effective. In acute lipodermatosclerosis, it is difficult to use compression therapy because of pain. It can respond well to stanozolol.

Answered by: Dr. Richard Haber

11. Desensitizing Allergic Individuals

Are there safe and effective means to desensitize allergic individuals with peanut or shellfish anaphylaxis?

Submitted by: William Fair, MD, Vernon, British Columbia

The area of food allergy and treatment has been a frustrating one at best. Aside from a few anecdotal reports and some recent studies, the time honoured approach of avoidance of the offending food remains the mainstay of treatment. Yet, avoidance remains difficult and severe reactions from accidental exposures occur all too frequently. A study published over 10 years ago[1] demonstrated the potential to increase tolerance to the oral peanut challenge, but the frequency of adverse events was unacceptably high. Since then, a variety of other approaches have been pursued (mainly in animal models), with human studies utilizing anti-IgE, as well as oral and sublingual immunotherapy. These latter studies have shown some degree of success in the area of milk allergy, egg allergy, peanut and hazelnut. Safety still remains a major concern.

A recent study looking at children with severe milk allergy[3] undergoing one year of specific oral tolerance induction found that 36% of children in the study group achieved a daily intake of cow's milk equal to 150 ml or more and were on an "unrestricted diet," although 10% could not complete the protocol due to side-effects. All patients had symptoms related to treatment (oral pruritus, cutaneous and GI being the most common) and were most common during the initial build-up phase while the children were in hospital, with some requiring epinephrine. The untreated group showed no change in reactivity. This study was significant in that it included severely affected patients, as opposed to a couple of other recent studies looking at hazelnut[4] and egg.[5] The ability of inducing long-term tolerance vs. short-term desensitization still needs to be addressed. In a study looking at immunotherapy to both milk and egg,[3] both outcomes seemed possible, as one-third of the treated children were felt to have achieved "permanent tolerance." To my knowledge, no controlled trials involving shellfish allergic patients have been attempted.

At this point, the future of oral food immunotherapy remains unclear and despite the encouraging new research, this form of treatment will not likely be available for clinical use for many years. Other approaches (or combinations of approaches) may emerge, offering more safe and effective alternatives. Examples include the use of adding anti-IgE antibody (omalizumab) to improve efficacy and safety, peptide immunotherapy, food allergy herbal formulas under development and DNA immunization with immunostimulatory sequences linked to allergens. The use of oral immunotherapy in the area of food allergy prevention in high-risk infants is also an exciting area and is currently under investigation. Currently, emphasis remains on patient education, careful food avoidance measures and ensuring the correct use and indications for an adrenaline injector.

References

1. Oppenheimer JJ, Nelson HS, Bock SA, et al: Treatment of Peanut Allergy with Rush Immunotherapy. J Allergy Clin Immunol 1992; 90(2):256-62.
2. Longo G, Barbi E, Berti I, et al: Specific Oral Tolerance Induction in Children with Very Severe Cow's Milk-Induced Reactions. J Allergy Clin Immunol 2008; 121(2):343-7.
3. Staden U, Rolinck-Werninghaus C, Brewe F, et al: Specific Oral Tolerance Induction in Food Allergy in Children: Efficacy and Clinical Patterns of Reaction. Allergy 2007; 62(11):1261-9.
4. Enrique E, Pineda F, Malek T, et al: Sublingual Immunotherapy for Hazelnut Food Allergy: A Randomized, Double Blind, Placebo-Controlled Study with a Standardized Hazelnut Extract. J Allergy Clin Immunol 2005; 116(5):1073-9.
5. Buchanan AD, Green TD, Jones SM, et al: Egg Oral Immunotherapy in Nonanaphylactic Children with Egg Allergy. J Allergy Clin Immunol 2007; 119(1):199-205.

Answered by: Dr. Tom Gerstner

12. Gouty Tophi on a Single Finger

Have you ever seen gouty tophi on a single distal finger?

Submitted by: Bill Taylor, MD, Medicine Hat, Alberta

Although fingertips are unusual locations for tophi deposition, there have been cases reported in the literature of biopsy proven tophi as the initial manifestation of gout without any acute arthritis. In most cases, the tophaceous deposits are on multiple fingers; however, single distal fingertip tophi have been described. Finger pads are another unusual site of tophi deposition which may mimic calcinosis.

Given that a single distal interphalangeal tophus would be rare, a much more common diagnosis of nodular osteoarthritis and Heberden's nodes would have to be excluded before making the diagnosis of tophaceous gout and treating a patient as such. A history of prior gouty arthritis, hyperuricemia, or other gout risk factors can be useful to raise suspicion for the possibility of an atypical tophaceous deposit.

Resource
1. López Redondo MJ, Requena L, Macía M, et al: Fingertip Tophi Without Gouty Arthritis. Dermatology 1993;187(2):140-3

Answered by: Dr. Sabrina Fallavollita; and Dr. Michael Starr

13. ß-Blockers in COPD Patients

Are cardioselective ß-blockers safe to use in COPD patients?

Submitted by: M. Ravalia, MD, Twilingate, Newfoundland

Cardioselective ß-blockers are frequently prescribed to individuals with co-existing conditions that benefit from ß-blockers (*e.g.*, post-MI, congestive heart failure) and conditions where there is risk of clinical worsening with the use of this class of medications. A recent review by Salpeter and colleagues highlighted the scarcity of data to support this practice.[1] The evidence base is limited to few subjects with chronic obstructive pulmonary disease (COPD) studied for short duration (*i.e.*, either after a single dose of a ß-blocker or a few weeks of therapy) showing no acute worsening of symptoms or lung function. There is also some epidemiological data that supports these findings showing no increase in hospitalization due to COPD exacerbation in patients on ß-blockers.[2]

It would seem, from the limited evidence currently available, that cardioselective ß-blockers can be safely tried in patients with COPD. However, patients started on this class of medication should be carefully monitored for deterioration in lung function and/or clinical status and re-evaluation or discontinuation of the use of ß-blockers if either occurs.

References
1. Salpeter S, Omiston T, Salpeter E: Cardioselective Beta-Blockers For Chronic Obstructive Pulmonary Disease. Cochrane Database Syst Rev 2005; (4):CD003566.
2. Chen J, Radford MJ, Wang Y, et al: Effectiveness of Beta-Blocker Therapy After Acute Myocardial Infarction in Elderly Patients with Chronic Obstructive Pulmonary Disease Or Asthma. J Am Coll Cardiol 2001; 37(7):1950-6.

Answered by: Dr. Paul Hernandez

14. Chronic Pelvic Pain

A 41-year-old male complains of pelvic pain with no evidence of urinary tract infection. Do you recommend to do cultures of expressed prostatic fluid or to just go directly to a four week trial of antibiotic treatment?

Submitted by: Silvia Solcova, MD, Cranbrook, British Columbia

Answered by: Dr. Hugues Widmer

Chronic pelvic pain is a cumbersome problem for both the patient and the clinician. The etiology is not totally clear and diagnosis is mostly clinical. Even if cultures of expressed prostatic fluid were negative, it would still be worthwhile to try a four week course of antibiotics. For that reason, I generally go directly to the antibiotic trial.

15. Reasonable Workup for Panic Disorder

What is a reasonable standard "organic" workup to do with a newly diagnosed panic disorder patient who appears to be healthy?

Submitted by: M. Lander, MD, Winnipeg, Manitoba

Answered by: Dr. Hany Bissada

Panic disorder may be seen in patients with endocrinopathies, neurological illnesses, mitral valve prolapse and substance-related states (*e.g.*, cocaine can increase the frequency of panic disorder); also, panic disorder is substantially more common as an independent disorder among alcoholics.

The initial evaluation should include (when appropriate):

- a thorough physical examination,
- blood tests for chemistry,
- hematology and thyroid function,
- urinalysis and
- an ECG.

If neurological abnormalities are suspected, a neurological examination may need to be supplemented with appropriate brain imaging studies. Prominent nocturnal pathology should be investigated in a sleep laboratory.

16. Topical Calcineurin Inhibitors

What is all the controversy regarding topical calcineurin inhibitors?

Submitted by: Anonymous

Two topical calcineurin inhibitors, topical tacrolimus ointment and topical pimecrolimus cream, are available in Canada for the treatment of atopic dermatitis. The controversy with these agents began in 2006 when the US FDA added a black box warning to the use of these agents. A black box warning is the highest level of five possible warning categories that the FDA can apply to a package insert. This black box warning stated that these medications may increase the risk of certain cancers including skin cancer and non-Hodgkin's lymphoma.

The FDA recommendation for the black box warning were based on animal data in which calcineurin inhibitors were used topically in amounts multiple times the maximally recommended equivalent human dose or given systemically as well as from a few post marketing case reports.

Both the Canadian Dermatology Association (CDA) and the American Academy of Dermatology (AAD) do not believe the FDA recommendation for a black box warning was supported by clinical evidence and experience and feel that these treatments can be safely used.

Pimecrolimus 1% cream is approved for the treatment of mild to moderate atopic dermatitis in adults and children over two-years-of-age. Tacrolimus 0.03% ointment is approved for moderate to severe atopic dermatitis for ages two to 15 and the 0.1% ointment is approved for patients > 15-years-of-age.

The CDA and AAD both support long-term safety studies currently being conducted by the manufacturers.

Answered by: Dr. Richard Haber

17. Stress ECHO for Coronary Artery Disease

How sensitive or specific is stress ECHO for coronary artery disease? If stress test is positive, but stress ECHO is negative, is there value to proceeding with more tests, such as myocardial perfusion imaging?

Submitted by: Roy Kwee, MD, Richmond Hill, Ontario

Stress testing (exercise ECG) has moderate sensitivity (65% to 70%) and specificity (75% to 80%) for diagnosis of myocardial ischemia. However, we have a great deal of evidence accumulated over the past 20 years on the prognostic value of the stress test. The most important predictor of outcomes is the exercise duration—the longer a patient is able to stay on the treadmill as the workload increases, the better the predicted survival.

However, many patients cannot do a stress test and achieve an adequate heart rate for diagnosis of myocardial ischemia because of comorbidities (*i.e.*, arthritis, obesity, deconditioning, stroke, chronic obstructive pulmonary disease *etc.*) or they have ECG abnormalities (*i.e.*, left bundle branch block [LBBB], left ventricular hypertrophy [LVH], ST-T changes) that render a stress test non-diagnostic. In these patients, an imaging test is required for diagnosis of myocardial ischemia. The choice between a nuclear myocardial perfusion scan or a stress ECHO will depend mainly upon local availability and expertise. Both tests have similar sensitivity (85%) and specificity is slightly higher for stress ECHO (about 80% vs. 70% for nuclear myocardial perfusion imaging).[1] There are more false-positive nuclear imaging results because of attenuation artifacts (breast, diaphragms).

Some studies have compared simultaneous stress ECHO and stress myocardial perfusion imaging. The diagnostic accuracy and prognostic value of the two techniques were found to be comparable. The relative accuracy of stress ECHO and stress nuclear myocardial perfusion imaging may be influenced by certain patient characteristics. For example, stress ECHO appears to be more accurate than stress nuclear imaging in patients with LVH, while vasodilator stress nuclear imaging is the recommended test in patients with LBBB, a paced ventricular rhythm, or atrial fibrillation. Obviously, if the patient is obese and has inadequate windows for ECHO, a nuclear scan is required. So, to answer the question, the stress test in this patient is a falsely positive result if the stress ECHO is normal and there is no reason to do a nuclear scan.

Reference
1. Fleischmann KE, Hunink MG, Kuntz KM, et al: Exercise Echocardiography or Exercise Spect Imaging? A Meta-Analysis of Diagnostic Test Performance. JAMA 1998; 280(10):913-20.

Answered by: Dr. Bibiana Cujec

18. Investigating Right Bundle Branch Block

What is the significance and recommended investigation in a healthy 50-year-old man who, on routine ECG, was found to have a right bundle branch block (RBBB)? He is a non-smoker, has normal lipids, normal weight and normal BP.

Submitted by: Dennis Glubish, MD, St. Albert, Alberta

The presence of a RBBB is a common finding in the general population. Most individuals with RBBB have no evidence of CV disease and the RBBB has no clinical significance. Generally, these patients do not require a series of investigations. When the RBBB is new and previous ECGs showed no evidence of RBBB, patients are at somewhat higher risk of coronary artery disease and congestive heart failure. These patients may warrant investigations, such as an ECHO, to assess left ventricular function, or functional testing to evaluate for the presence of coronary disease.

Answered by: Dr. Richard Sheppard

19. Diagnosing and Investigating Bell's Palsy

How is Bell's palsy diagnosed and investigated?

Submitted by: Danielle Fisch, MD, Canton-de-Hatley, Quebec

Bell's palsy, also called an acute idiopathic palsy of cranial nerve (CN) VII, is a clinical diagnosis. It is a fairly common neurologic problem to present to the office of the FP, presents usually in young people from teenagers to age 40 and causes unilateral upper and lower facial droop.

Investigation primarily consists of a good history and physical examination.

History:

- Change in facial sensation, especially any neuropathic-type pain in the forehead (common in herpes zoster infections)
- Symptoms of other cranial nerve dysfunction, diplopia, dysphagia, *etc.*
- Any other focal neurologic symptoms in the rest of the body, especially any problems with coordination or dizziness
- Any headache, especially post-auricularly on the side of the palsy (common in Bell's palsy)
- Past history of relevant systemic illnesses:
  - Rheumatologic disease
  - Malignancy
  - Atherosclerosis, especially cerebrovascular disease

Physical:

- In Bell's palsy you should ONLY see abnormalities related to CN VII
- Weakness of upper and lower face, including weakness of eye closure
- You may see mild ipsilateral decreases in tear formation and taste and ipsilateral noise sensitivity
- The remainder of the neurologic exam should be normal. Particular attention should be paid to the cranial nerves and coordination
- There should not be any rashes or vesicles on the face, head, or ear

If there are no abnormalities on examination except related to CN VII and there are no "red flags" on history, then I would not investigate any further. I would start them with a tapering dose of prednisone and an antiviral (*e.g.*, acyclovir or valacyclovir) within three days of onset. If there is concern based on any unexpected abnormality on your history or physical, I would speak to your local neurologist about the particulars of the case and get advice regarding urgent investigation, which would usually include a scan.

Answered by: Dr. Inge Loy-English

Bell's palsy is a fairly common neurologic problem to present to the office of the FP, presents usually in young people from teenagers to age 40 and causes unilateral upper and lower facial droop.

20. Alternate Options for Osteoporosis Management

What are alternate options when bisphosphonates do not improve osteoporosis?

Submitted by: Vincent Luykenaar, MD, Coaldale, Alberta

The goal when managing osteoporosis is to reduce fracture risk. One is considered to have "failed" a given treatment if they sustain non-traumatic fractures while on therapy or if BMD continues to decline despite therapy.

Bisphosphonates are effective in the management of osteoporosis. Failure of therapy with a bisphosphonate is often due to poor compliance or poor absorption of oral forms. If a failure is due to these reasons then IV bisphosphonates should be tried.

Zoledronic acid, the newest IV bisphosphonate to be approved for osteoporosis in Canada, has been found to:

- significantly improve BMD,
- reduce fracture rate and
- decrease markers of bone turnover when compared to placebo.[1]

It is a good alternative for patients who do not tolerate oral bisphosphonates given that it is a yearly infusion.

If patients fail IV bisphosphonate therapy, another option would be parathyroid hormone. There is a recommended three month bisphosphonate wash-out period before beginning therapy, as the effect of parathyroid hormone can be dampened by bisphosphonates, hormonal therapy, raloxifene and calcitonin which tend to be less effective. Strontium and selenium are also being used to treat osteoporosis but are not yet approved in Canada.

Reference

1. Black DM, Delmas PD, Eastell R, et al: Once-Yearly Zoledronic Acid for Treatment of Postmenopausal Osteoporosis. N Engl J Med 2007; 356(18):1809-22.

Answered by: Dr. Sabrina Fallavollita; and Dr. Michael Starr

21. Interventional Treatment of Cerebrovascular Disease

There has been a lot of progress in interventional cardiology in the last 10 years. Has there been progress in interventional treatment of cerebrovascular disease?

Submitted by: Michel Bernier, MD, St. Foy, Quebec

There has been considerable progress in interventional treatment of cerebrovascular disease and interventional neuro-radiology. The most important change probably is the widespread use of IV r-tissue-type plasminogen activator (rtPA) in the treatment of acute stroke. In appropriate patients, it has a very profound effect at decreasing infarct size and improving functional status. However, it does carry a risk of bleeding of about 6%. If a patient is not a candidate for IV rtPA infusion, sometimes they will be a candidate for intra-arterial (IA) infusion. This infusion is done at the site of the clot and is primarily done by subspecialty trained neuroradiologists. Trials are ongoing to see if a combined IA and IV approach may be better than just one or the other.

Other areas of interventional neurology/neuroradiology include:

- Carotid angioplasty and stenting. A large trial is currently underway comparing it to standard carotid endartarectomy
- Cerebral aneurysms are now frequently treated by "coiling" instead of surgical clipping
- Cerebral arteriovenous malformations can now be embolized endovascularly

References
1. Pelz David M, Levy Elad I, Hopkins N: Advances in Interventional Neuroradiology 2007. Stroke 2008; 39;268-72.

Answered by: Dr. Inge Loy-English

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22. Ice Cream in Lactose Intolerant Patients

Can a patient be lactose intolerant, but be able to eat ice cream without a problem?

Submitted by: I. D'Souza, MD, Willowdale, Ontario

Lactose intolerance is a very common disaccharidase deficiency that results from absent or reduced levels of lactase enzymes. Lactase expression is at its peak during childhood development but declines later on in life in most of the world's population. Absence of decreased lactase activity leads to symptoms of flatulence, abdominal pain or cramping and diarrhea with ingestion of milk or milk products. Lactase deficiency is present in up to 15% of persons of European descent, up to 80% of Black patients and up to 100% of Asians. A diagnosis of lactose intolerance can be made with a thorough history and supported by dietary avoidance of dairy products. The diagnosis can be confirmed by a hydrogen breath test or lactose tolerance test. Treatment consists of avoiding lactose-containing foods. The degree of lactose malabsorption varies greatly among patients with lactose intolerance, but most can tolerate up to 12 oz of milk daily without symptoms. Lactase enzyme supplements may help prevent some abdominal symptoms associated with ingestion of dairy products. Dx

Answered by: Dr. Richmond Sy