1. Disadvantages of Drug-eluting Stents

What are the disadvantages of drug eluting stents?

Submitted by: Keng Sim, MD, Acton, Ontario

Drug-eluting stents are coated with a polymer that contains an antiproliferative drug, such as sirolimus or paclitaxel. These drugs decrease the likelihood of restenosis after percutaneous coronary intervention. The major disadvantage is that patients need to remain on clopidogrel in addition to ASA for at least one year. It takes longer for drug eluting stents to develop an endothelial lining. Drug-eluting stents are therefore more prone to thrombotic occlusion and require a longer period of dual antiplatelet therapy. Dual antiplatelet therapy increases the risk of bleeding. About 25 to 30% of patients on both ASA and clopidogrel will have nuisance bleeding with easy bruising and increased bleeding from cuts; 5% will have internal bleeding; and < 1% will have life-threatening bleeding (such as intracranial bleed or bleeding that necessitates blood transfusions). Bleeding risks are higher if the patient is on warfarin in addition to ASA. Patients who have emergency surgery while on clopidogrel and ASA will bleed more and have a greater requirement for blood transfusions.

Answered by: Dr. Bibiana Cujec

2. Antivirals and Birth Control Pills

Do antivirals interfere with the efficiency of birth control pills?

Submitted by: Christina Fisher, MD, Toronto, Ontario

Antivirals are eliminated via the kidneys and do not interfere with the metabolism of combined hormonal contraceptives, which are primarily eliminated through the liver. Only those medications that induce the hepatic cytochrome P450 enzyme system have the potential to decrease the efficacy of combined hormonal contraceptives. Antifungals and anticonvulsants are the most common medications that induce the cytochrome p450 system.[1]

Reference

1. Carol Repchinsky (ed.). Canadian Compendium of Pharmaceuticals and Specialties. Canadian Pharmacists Association, Ottawa, 2010.

Answered by: Dr. Victoria Davis

3. Peripheral Arterial Disease

What are the Canadian consensus guidelines (CCS) for peripheral arterial disease?

Submitted by: Paul Stephan, MD, Scarborough, Ontario

The CCS guidelines on peripheral arterial disease (PAD) were developed in 2005. Salient points include:

1. Address vascular risk factors in all patients with PAD, especially smoking cessation
2. Walking improves claudication
3. Ankle brachial index (ABI) is abnormal if < 0.9 or > 1.3 (non-compressible vessels). Severe PAD is present if ABI < 0.4
4. Screen for abdominal aortic aneurysm with ultrasound in men 65- to 74-years-old or men > 50-years-old with a positive family history of aortic aneurysms
5. Men with abdominal aortic aneurysms > 4.5 cm should be referred to a vascular surgeon. Repair is considered in men with abdominal aortic aneurysms > 5.5 cm and women with aneurysms > 5.0 cm. Endovascular repair may be feasible if the risk to the patient is too high for open surgical repair
6. Consider the possibility of renal artery stenosis in patients with resistant hypertension despite three antihypertensive medications and creatinine < 300 umol/L or those with unexplained flash pulmonary edema. Investigate with an abdominal ultrasound followed by a MRA/CTA or Duplex Doppler ultrasound of renal arteries
7. Pentoxifylline is not indicated for PAD
8. Medical therapy of PAD includes ASA, ACE inhibitor, and statin therapy
9. The two indications for revascularization in PAD are unacceptably limiting claudication and critical limb ischemia (non-healing ulcer, rest pain, gangrene)
10. Routine non-invasive imaging is not recommended for cardiac risk assessment prior to vascular surgery. It is indicated only if the patient's symptoms would justify further investigation and intervention even in the absence of planned vascular surgery[1]

Reference

1. Roussin, A: Screening and Diagnostic Techniques for Peripheral Arterial Disease [Internet]. In 2005 Canadian Concensus Conference: Peripheral Arterial Disease. Canadian Concensus Conference. Available at: http://www.ccs.ca/download/consensus_conference/consensus_conference_archives/CCFinalPre_CJC_Pub.pdf. Accessed February 21, 2011.

Answered by: Dr. Bibiana Cujec

4. Workup for Chronic Anemia

What is the workup for chronic anemia?

Submitted by: Mohammed Keshafy, MD, Alliston, Ontario

Anemia is defined as having a hemoglobin level below the laboratory reference specific to a man or woman. Although there is no formal definition, chronic anemia can be ascribed to anemia that has persisted for six months or more. There are numerous causes that should be considered and the workup should begin with the mean corpuscular volume or mean cell volume (MCV). An anemic patient with a MCV that is low, normal, or high is said to have a microcytic, normocytic, or macrocytic anemia. Common causes of microcytic anemia include iron deficiency anemia, thalassemia, anemia of chronic inflammation (previously called anemia of chronic disease), and sideroblastic anemias (including lead poisoning). The most common anemia is iron deficiency anemia that requires not only repleting the iron stores, but also a search to correct the underlying cause of the condition. In normocytic anemia causes, such as acute blood loss and hemolysis, can be separated from bone marrow failure states and anemia of chronic inflammation by a reticulocyte count, which will be high in the former and low or normal in the latter causes. Macrocytic anemia can be due to vitamin B12 or folate deficiencies, medications that impair DNA synthesis, liver disease, alcohol misuse, hypothyroidism, reticulocytosis, or underlying bone marrow failure states.

In all the causes of chronic anemia, the history and physical, along with the MCV, will help guide further investigations for the most common causes outlined above.

Answered by: Dr. Cyrus Hsia and Dr. Leonard Minuk

5. Cardiac Contraindictions for Adult ADHD Prescriptions

What are the cardiac contraindications to prescribing stimulants for adult ADHD?

Submitted by: Mary Lilley, MD, Toronto, Ontario

Psychostimulants can cause increased blood pressure (particularly in patients with pre-existing hypertension), and cardiac arrhythmias (particularly in individuals with cardiovascular disease). Such effects are not likely in patients with-out cardiovascular disease or hypertension. Amphetamine is more potent than methylphenidate in producing cardiac or blood pressure effects.

Patients should be screened for cardiovascular risks by history (early cardiac death in the family, family cardiac history, syncope, chest pain upon exertion, *etc.*). If risk factors are present, an ECG and a cardiac consultation should be considered.

In general, psychostimulants are contraindicated in patients with structural cardiac abnormalities or cardiovascular disease, severe angina pectoris, tachyarrhythmias, and severe hypertension.

Resource
1. Drugs for ADHD. In: Virani AS, Bezchlibnyk-Butler KZ, and Jeffries JJ (eds.): Clinical Handbook of Psychoactive Drugs. 18th edition. Hogrefe & Huber Publishers, Toronto, 2009, 216–234.

Answered by: Dr. Hany Bissada

6. Toenail Infections

Do topical antifungals work for fungal toenail infections?

Submitted by: Anonymous

The only topical antifungal agent approved for treating onychomycosis in Canada is 8% ciclopirox olamine, which comes in a nail lacquer. It is approved for treating onychomycosis with mild to moderate nail involvement and with no lunular (matrix) involvement. It is usually used if only a few nails are involved. This agent is much less effective in providing a mycologic and clinical cure for toenail onychomycosis than oral antifungal agents. In several US studies, the mycologic cure rate was between 29 and 36%. The topical nail lacquer also requires 48 weeks of daily application with accompanying nail debridement. A trial of topical ciclopirox nail lacquer would be best in cases with < 50% involvement of the nail plates (with no lunular involvement), in superficial white onychomycosis (where the dermatophyte is only in the nail plate), in children where nail growth is more rapid, and in cases where use of oral antifungals puts the patient at risk for drug interactions.

Answered by: Dr. Richard Haber

7. Adrenal Gland Nodule

What is the management of an adrenal gland nodule (incidental finding on CT scan)?

Submitted by: Anonymous

Adrenal incidentalomas are found in 4 to 5% of imaging studies in the general population. The most common cause is a non-functioning adrenal adenoma, which often carries no clinical concern. Less common causes include functioning adenomas, primary adrenal cancer (almost always > 6 cm), metastatic lesions, myolipomas, and hamartomas to name a few. There are two important questions to ask in sorting this out:

1. Is the lesion functioning? (Cushing's, pheochromocytoma, hyperaldosteronism, or virilizing/feminizing tumour)
2. Is it malignant?

A thorough history, physical examination, biochemical assessment, and review of the imaging can almost always sort this out. Biochemical assessment includes plasma potassium, creatinine, and, if hypertensive, a plasma renin and aldosterone. Also, androgen and estradiol levels may be indicated. In addition, 24 hour urine collections for creatinine, catecholamines, metanephrines, and free cortisol are indicated. The imaging should be reviewed for features suggestive of malignancy (irregularity, calcification, vascularity, growth, and size > 4 to 6 cm). If there is suspicion of a functioning lesion or malignancy, a referral should be made to consider surgical removal. The above assessment should be repeated periodically for a few years depending on the clinical status of the patient and the imaging characteristics.

Answered by: Dr. Ally Prebtani

8. Screening for Chronic Diarrhea

What is the screening for chronic diarrhea?

Submitted by: Marie-Josée Leclerc, MD, Québec, Québec

Diarrhea is defined as more than three bowel movements per day or at least 200 g of stool per day. The definition of chronic diarrhea varies, but, according to the American Gastroenterological Association, it is diarrhea lasting for longer than four weeks. Differentiating between acute and chronic diarrhea is important, because the causes differ. While acute diarrhea tends to be caused by self-limited infections, chronic diarrhea has a large differential diagnosis.

The most important screening tool for chronic diarrhea work-up is taking a good history. It can help you to differentiate functional bowel disorders, such as irritable bowel disease (IBS), from organic causes that require further investigation. The presence of red flag symptoms, including weight loss (or impaired growth in children), fever, hematochezia, and nocturnal symptoms points towards an organic etiology. Other key features in the history include: extra-intestinal manifestations of inflammatory bowel disease (IBD) such as arthralgias, oral ulcers, rash, uveitis, and jaundice; travel history; recent antibiotic use; and family history of IBD, celiac disease, or malignancy. There may be clues in the medical history such as diabetes (bacterial overgrowth), lactose intolerance, hyperthyroidism, bowel surgery/radiation, chronic pancreatitis, and autoimmune conditions.

Basic bloodwork includes markers of inflammation (CRP and ESR), complete blood count (anemia and leukocytosis), TSH, evidence of malabsorption (albumin, B12, folate, iron studies, calcium), and celiac testing (anti-tTG and IgA level). If the history or lab tests suggest an organic cause, the patient may require further investigations, such as stool studies, abdominal imaging (CT or ultrasound), and referral to a gastroenterologist for endoscopic evaluation.

Patients who lack evidence of organic chronic diarrhea and are under the age of 50 years, should not have unnecessary investigations. The current Rome III criteria for functional bowel disease includes: symptoms of recurrent abdominal pain or discomfort and a marked change in bowel habit for at least six months, with symptoms experienced on at least three days of at least three months. Two or more of the following must also be present: pain is relieved by a bowel movement, onset of pain is related to a change in frequency of stool and onset of pain is related to a change in the appearance of stool.

Suggested Reading
1. Fine KD, Schiller LR: AGA Technical Review on the Evaluation and Management of Chronic Diarrhea. Gastroenterology 1999; 116(6):1464–1486.
2. Longstreth GF, Thompson WG, Chey WD, *et al*: Functional Bowel Disorders. Gastroenterology 2006; 130(5):1480–1491.

Answered by: Dr. Robert Bailey and Dr. Carrie Ye

9. Congestive Cardiac Insufficiency and MS

Is there a link between congestive cardiac insufficiency and multiple sclerosis (MS)?

Submitted by: Alain Turcotte, MD, Québec, Québec

There has been much discussion in the medical field about this issue recently. Dr. Paolo Zamboni published his research on cerebrospinal venous insufficiency and MS in 2009. He compared 65 patients with MS with 235 patients without MS and reported an association of MS with venous insufficiency. He suggested that impaired venous drainage may be contributing to demyelination, which is the underlying mechanism of mulptile sclerosis. He also reported results of a prospective open label study for endovascular treatment of chronic venous insufficiency of 65 inidividuals with MS. These patients were already on the disease-modifying therapy. He reported significant improvement in patients with relapsing MS. Dr. Robert Zivadinov and colleagues from the University of Buffalo reported a study of 500 patients, in which they found evidence of venous insufficiency in more than 56%patients, and 20% of healthy controls.[2] Although this work suggested a possible association between venous insufficency and MS, there is currently no agreement among experts about the causative role of venous insufficiency and MS. Based upon the above mentioned results, an association between MS and venous insufficency may be possible; although, this finding could be coincidental. The 100% association suggested by Dr. Zamboni's initial study of 65 subjects has not been reported by any other study. It is too early to conclude any results from the above mentioned work and further research is needed in this area.

Resources

1. Zamboni P, Galeotti R, Menegatti E, *et al*: Chronic Cerebrospinal Venous Insufficiency in Patients with Multiple Sclerosis. J Neurol Neurosurg Psychiatry 2009;80(4):392–9.
2. Weinstock-Guttman B, Zivadinov R, Cutter G, *et al*: Chronic Cerebrospinal Vascular Insufficiency Is Not Associated with HLA DRB1*1501 Status in Multiple Sclerosis Patients. PLoS One 2011;6(2):e16802.

Answered by: Dr. Abdul Qayyum Rana

10. Chronic Hiccups

Hiccups are a common complaint in primary care. Some hiccups become chronic and aggressive. Can chlorpramazine be helpful?

Submitted by: M. Essabri, MD, Toronto, Ontario

Hiccups (or singultus) is a condition that arises with sudden contraction of the diaphragm and intercostal muscles, which is then followed immediately by laryngeal closure. Hiccups mostly commence during inhalation and their frequency is inhibited by elevated arterial $PaCO_2$, which serves as the basis for breath holding as an intervention.

With over 100 causes of hiccups identified, it can be difficult to pinpoint the exact etiology. The majority of hiccups are found in male patients (91%) who are older than 50 with comorbid conditions (78%). There are certain subsets of patients, including palliative care and postoperative patients that may have difficulties with this condition. Episodes may last for 48 hours, but, if they last longer than this, they are considered to be persistent; those lasting longer than two months are considered intractable.

Hiccups can be defined as either central or peripheral in origin. The most common peripheral cause is thought to be due to gastric distension. Other causes may include gastroesophageal reflux disease (GERD), achalasia, esophageal or small bowel obstruction, sudden changes in temperature, or rapid and abundant ingestion of alcohol. Patients with certain systemic disorders, including uremia, diabetes mellitus, hyponatremia, and hypocalcemia, can suffer from intractable hiccups.

Central causes of hiccups are tightly correlated to structural or functional pathology of the medullary region of the vagal nuclei. This will be aggravated by conditions including brainstem tumours, tuberculomas, sarcoidosis, as well as demyelination or infarcts.

Most cases of hiccups will resolve spontaneously; however, persistent or intractable hiccups can lead to significant discomfort and possibly hospital admissions.

Management should be directed at the underlying etiology, if it is identifiable. For example, if the hiccups are likely secondary to GERD, PPI's can be effective. As well, removing any pharmacological agents known to be associated with hiccups (steroids, certain antibiotics, opiates, chemotherapeutic agents, methyldopa, benzodiazapines) may alleviate the condition.

Chlorpromazine remains the only US FDA approved medication for hiccups, as it has undergone trials for efficacy. It is generally prescribed as a single IM or IV dose of 25 to 50 mg or orally as 25 mg t.i.d. Remember, there are numerous side-effects associated with chlorpromazine, including urinary retention, hypotension, delirium, and glaucoma.

Other pharmacologic interventions for hiccups include baclofen, gabapentin, and metoclopramide.

Answered by: Dr. Robert Bailey and
Dr. Hillary Austin

11. Vitamin D Intake

With the suggestion that vitamin D prevents cancers, what are some of the recommendations regarding vitamin D intake?

Submitted by: Charles Lynde, MD, Markham, Ontario

Vitamin D supplementation is proven to be beneficial for osteoporosis and fall prevention. Lately, Vitamin D has been promoted as beneficial for extra-skeletal health, such as cardiovascular disease, immune response, muscle function, mortality, and cancer. However, no randomized control trial (RCT) has shown that Vitamin D supplementation is beneficial for any of the above outcomes. Furthermore, a causal association between poor vitamin D status and nearly all major diseases (cancer, infections, autoimmune diseases, cardiovascular, and metabolic diseases) has not been proven. As a result, the recommendations for Vitamin D (cholecalciferol = D3) supplementation for possible extra-skeletal health for the general population is similar to that for osteoporosis and fall prevention, which is anywhere from 800 to 100 IU per day of Vitamin D. In patients with Vitamin D deficiency [25(OH)D < 50 nmol/L], treatment with 50,000 units of vitamin D2 or D3 orally once per week for six to eight weeks, followed by a maintenance dose (*e.g.*, 800 to 1,000 units of vitamin D3 daily) thereafter, is recommended.

Answered by: Dr. Ally Prebtani

12. Head Lice Treatments

What are some treatment options for head lice?

Submitted by: L. Grbac, MD, Etobicoke, Ontario

Pediculosis capitis is a common condition in children, which has recently become more difficult to treat with the emergence of lice that are resistant to conventional therapies.

The most commonly used treatment in Canada is 1% permethrin, available as a shampoo or as a cream rinse. Permethrin 1% shampoo is massaged into the scalp, left on for eight minutes, and then rinsed out. Permethrin 1% cream rinse is applied to the scalp for ten minutes and then rinsed off. Both treatments should be repeated in one week, as they work best at killing nymphs and adult lice, but have poor ovicidal activity. These treatments work as neurotoxic insecticides.

There are also shampoos/conditioners containing pyrethrins and piperonyl butoxide. The pyrethrins are neurotoxic and piperonyl butoxide is a synergist that lacks toxic effects on pediculosis itself, but it inhibits breakdown of the pyrethrins by the head lice, thus enhancing the effect of the primary agent.

Recently, a pediculocide rinse containing 50% isopropyl myristate was released in Canada. This product is non-neurotoxic and works by dissolving the wax layer that covers the exoskeleton of the head louse, resulting in its dehydration and death. With this method, resistance is unlikely to occur. It is applied for ten minutes and rinsed out with repeated treatment in one week.

A less commonly used treatment in resistant cases of pediculosis capitis is oral cotrimoxazole, which is used for ten days. The antibiotic is postulated to work by eliminating symbiotic bacteria in the gut of the louse. Finally, oral ivermectin, an antihelmintic agent in a single-dose of 200 micrograms/kg repeated in seven days, is effective in treating pediculosis capitis.

Answered by: Dr. Richard Haber

13. Treatment for Hoarding

What is the best treatment for hoarding? Do drugs used for obsessive-compulsive disorder (OCD) help? Can psychotherapy be of help?

Submitted by: Gary Paul Stephan, MD, Scarborough, Ontario

Hoarding presents as the acquisition of, and failure to discard, a large number of possessions that appear to be useless or of limited value. This leads to cluttered living spaces that preclude the activities for which these spaces were designed. Many people who hoard do not recognize the negative impact hoarding has on their lives or do not believe they need treatment. This is especially true if their possessions offer emotional comfort.

It is not clear whether compulsive hoarding is a condition in itself or, rather, a symptom of an obsessive-compulsive disorder. Hoarding behaviour could also be related to obsessive–compulsive personality disorder.

Cognitive behaviour therapy is the most common form of psychotherapy used to treat hoarding and often includes decluttering the patient's home during in-home visits by a therapist or professional organizer. In terms of pharmacological treatment, hoarding is treated with antidepressants, mainly SSRI, such as fluoxetine, sertraline, or citalopram.

When the response to psychotherapy alone is less than adequate, then combining psychotherapy with an SSRI is indicated.

Answered by: Dr. Hany Bissada

14. Skin Bruising with ASA

Can the amount of low dose ASA (*i.e.*, 81 mg daily) be reduced for patients experiencing easy skin bruising, while still retaining the desired goal of coronary prevention?

Submitted by: Jerry Graner, MD, Toronto, Ontario

Doses of ASA below 75 mg daily have not been shown to be better than placebo in preventing vascular events.[1] However, if the patient is very bothered by skin bruising and the choice is between discontinuing ASA or taking it every second day, I usually recommend that the patient take ASA 81 mg at least every second or third day. Another alternative would be to switch from ASA to clopidogrel, if the patient has known coronary artery disease (CAD) or has a high risk of CAD.

Reference

1. Antithrombotic Trialists' Collaboration: Collaborative Meta-analysis of Randomised Trials of Antiplatelet Therapy for Prevention of Death, Myocardial Infarction, and Stroke in High Risk Patients. BMJ 2002;324(7329):71–86.

Answered by: Dr. Bibiana Cujec

15. Testing for Clotting Disorders

If I suspect a clotting disorder (family history of DVTs, death, *etc.*), what tests should I order?

Submitted by: Gayle Garber, MD, Conception Bay South, Newfoundland

Testing for inherited and acquired hypercoagulable conditions is generally done as part of the investigation of unprovoked (idiopathic) venous thromboembolic events (VTE), such as deep vein thrombosis (DVT) and pulmonary embolism (PE). An unprovoked VTE is defined as an event that occurs without a known reversible major risk factor, such as:

- Recent major surgery (within 1 month)
- Hospitalization
- Plaster cast immobilization
- Active cancer
- Pregnancy or early postpartum period

The main reason for performing hypercoagulability testing is to determine the duration of anticoagulation therapy for an acute VTE based on the predicted risk of recurrence. We do not advocate hypercoagulability testing in patients without a personal history of unprovoked VTE, except in highly selected cases (patients with a very strong family history of unprovoked VTE). Our standard hypercoagulability screen includes assays for proteins C and S, antithrombin, the lupus anticoagulant, antiphospholipid antibodies, activated protein C resistance (with genetic testing for Factor V Leiden as necessary), and determination of the G20210A Prothrombin gene mutation. Lupus anticoagulant and antiphospholipid antibody testing are not, however, indicated in family screening, as they are acquired, rather than inherited, risk factors.

Answered by: Dr. Cyrus Hsia and Dr. Leonard Minuk

16. Diagnosing Diabetes Mellitus

What is the best single test for diagnosis of diabetes mellitus?

Submitted by: A. Garg, MD

There is no single best test for the diagnosis of diabetes mellitus (DM). They all have their pros and cons. Currently, there are three tests accepted for the diagnosis.

1. First, a fasting blood glucose ≥ 7.0 mM on two separate occasions in the absence of intercurrent illness
2. Second, a random blood glucose ≥ 11.1 mM in conjunction with the classic symptoms of DM (polyuria, polydipsia, polyphagia, weight loss)
3. Third, a two hour blood glucose level of ≥11.1 mM after a 75 g oral glucose load (OGTT)

Some societies have now adopted a HbA1c ≥ 6.5% diagnostic of DM, but the Canadian Diabetes Association has yet to look at this further before adopting it as a standard.

Reference
1. Canadian Diabetes Association: 2008 Clinical Practice Guidelines. Canadian Diabetes Association Diabetes Care, 2009; 32(7): n.p.

Answered by: Dr. Ally Prebtani

17. Anticoagulant Guidelines

How long should anticoagulants be used? How long should ASA be used for primary prevention? How long should warfarin be used for deep vein thrombosis and pulmonary embolism?

Submitted by: Dilip Shamanna, MD, Calgary, Alberta

In patients who are at intermediate or high risk of coronary artery disease (CAD), based on Framingham or Reynolds risk scores, ASA should be continued long-term for prevention of vascular events. Patients who have been diagnosed with CAD should also continue on ASA long-term.

Warfarin should be given for three to six months if the patient has a pulmonary embolism/DVT with a reversible or time-limited risk factor (*e.g.*, air travel, post-operative). If there is no obvious risk factor for pulmonary embolism/DVT (such as immobility, oral contraceptive use, recent surgery, malignancy), long-term anticoagulant use is superior to anticoagulant use for six months.[1] After a second pulmonary embolism/DVT, or in the setting of malignancy, anticoagulant use should be continued long-term (*i.e.*, lifelong). In the setting of cancer, low molecular weight heparin is superior to warfarin over a six month period.[2]

Resource

1. Ridker PM, Goldhaber SZ, Danielson E, *et al*: Long Term, Low-Intensity Warfarin Therapy for the Prevention of Recurrent Venous Thromboembolism. N Engl J Med 2003;348(15):1425–34.
2. Lee AY, Levine MN, Baker RI, *et al*: Low Molecular Weight Heparin Versus a Coumarin for the Prevention of Recurrent Venous Thromboembolism in Patients with Cancer. N Engl J Med 2003;349(2):146–153.

Answered by:
Dr. Bibiana Cujec

18. Serotoninergic Syndrome and Antidepressants

What antidepressant can we use safely in combination (to treat pain, depression, sleep) and how can we recognize the serotoninergic syndrome and avoid it?

Submitted by: Martin Lanoue, MD, Saint Leonard, Québec

Duloxetine hydrochloride is a potent serotonin and norepinephrine reuptake inhibitor (SNRI). It is a safe and well tolerated antidepressant. At a dose of 60 to 120 mg/day, several randomized control trials found it to be safe and effective in the management of diabetic peripheral neuropathic pain. Other studies found that it is also efficacious in most outcome measures in subjects with primary fibromyalgia with or without major depressive disorder, particularly in women. If insomnia is a problem, a small dose of mirtazapine 15 to 30 mg or trazadone 50 to 100 mg could be added at bedtime. Amitriptyline is another antidepressant with analgesic and sedative properties.[1]

Serotoninergic syndrome results from excessive increases in serotoninergic tone and is characterized by tremour at rest, hypertonicity, myoclonus, and autonomic signs. Hallucinations may also occur, and life threatening hyperthermia, rhabdomyolysis, respiratory distress, and death have been reported. For prevention, a given SSRI's dosage should not surpass the maximum recommended dosage. Prescribing a SNRI or L-Tryptophan, in addition to an SSRI the patient is already taking, should be done with caution, and the patient should be closely monitored. Also adding meperidine to a patient on SSRI may increase the risk of the serotoninergic syndrome.

Reference

1. Wiesner O, Russell KA, Lee AS, *et al*: A Double-blind, Multicenter Trial Comparing Duloxetine with Placebo in the Treatment of Fibromyalgia Patients with or without Major Depressive Disorder. Arthritis & Rheumatism 2004; 50(9): 2974–2984.
2. Carroll LJ, Cassidy JD, Cote P: Duloxetine vs. Placebo in Patients with Painful Diabetic Neuropathy. Pain 2005; 116(1–2) 109–118.

Answered by: Dr. Hany Bissada

19. Methotrexate in Polymyalgia Rheumatica Patients

In a patient with polymyalgia rheumatica, when is methotrexate initiated?

Submitted by: Natalie Fouchon, MD, Bathurst, New Brunswick

Polymyalgia Rheumatica (PMR) is an inflammatory syndrome characterized clinically by pain and stiffness of the shoulder, neck and/or pelvic girdle with laboratory evidence of severe inflammation. Prednisone is the mainstay for treatment, with a starting dose of 10 to 20 mg/day with a slow taper over a period of at least a year. Relapses are common, ranging from 20 to 55% of cases.[1] Patients who taper rapidly are more likely to relapse, and, in this regard, it was observed that a tapering rate of < 1 mg/month after the initial prednisone dose is associated with a lesser incidence of relapse.

Methotrexate was evaluated as a steroid-sparing agent in three randomized placebo controlled trials, with doses ranging from 7.5 mg/week to 10 mg/week.[2] In all studies, Methotrexate was given at the onset of initial steroid treatment. In the study using a dose of 7.5 mg/week, there was no difference in cumulative prednisone dose between methotrexate and placebo, (however, 6 out of the 40 patients had a concurrent diagnosis of giant cell arteritis). In the second study, at 12 months, 50% of the methotrexate patients (10 mg/week) were able to stop prednisone, compared to none of the placebo patients. The group without methotrexate had a higher daily mean prednisone dose, as well as a higher cumulative dose. In the last study, patients were also more likely to stop prednisone in the methotrexate group (10 mg/week) than in the placebo group.

As a result of this limited data, there is no consensus about whether, or when, to start methotrexate in polymyalgia rheumatica. However, methotrexate (at least 10 mg/week) could be considered in those patients who are at very high risk of steroid-induced adverse events. Fortunately, for PMR, steroid doses can usually be kept relatively low, and, thus, a strategy of adding methotrexate is seldom employed.

Reference

1. Gonzalez-Gay MA, Agudo M, Martinez-Dubois C, *et al*: Medical Management of Polymyalgia Rheumatica. Expert Opin Pharmacother 2010; 11(7):1077–87.
2. Hernandez-Rodriguez J, Cid MC, López-Soto A, *et al*: Treatment of Polymyalgia Rheumatica: A Systematic Review. Arch Intern Med 2009; 169(20):1839–50.

Answered by: Dr. Fares Kalache and Dr. Michael Starr

20. Treating Chloasma

How do you treat chloasma, the mask of pregnancy?

Submitted by: Paul Zalan, MD, Danforth, Ontario

Up to 70% of pregnant women develop some degree of chloasma, and it is more common in darker or Asian skin tones. Frequently, this hyperpigmentation fades slowly after pregnancy but can be persistent in a small percentage of women. Little can be done to treat chloasma during pregnancy, when topical therapy is contra-indicated, other than using broad spectrum sunscreens with an SPF of at least 30. All wavelengths of light, including UVB, UVA and visible light, can make chloasma worse.

If the chloasma is persistent post pregnancy and the patient desires treatment and is not breastfeeding, treatment options include topical hydroquinone preparations as well as topical tretinoin preparations. Other options are glycolic acid topical preparations as well as glycolic acid chemical peels. Laser therapy has been tried, but it is usually not effective in treating chloasma or melasma. Continued application of sunscreens is important regardless of the type of treatment being used. Avoidance of oral contraceptives post pregnancy would normally be recommended. A final consideration is the use of camouflage cosmetics to conceal the hyperpigmentation.

Answered by: Dr. Richard Haber

21. Anticonvulsants and Chronic Pain Management

Please comment on the use of anticonvulsants in chronic pain management?

Submitted by: Anonymous

Some anticonvulsants play a significant role in the management of chronic pain, in particular pain related to trigeminal neuralgia, herpetic neuralgia, and polyneuropathy. Carbamazepine is the medication of choice for treatment of trigeminal neuralgia. Other anticonvulsants that have a role in the treatment of trigeminal neuralgia include phenytoin, gabapentin and pregabalin. Gabapentin and pregabalin have a major role in the management of neuropathic pain due to polyneuropathy. The initial reports of these analgesic effects of anticonvulsants involved patients who used phenytoin in 1942. Since then there have been several reports of successful use of other anticonvulsants in the management of neuropathic pain. Carbamazepine and lamotrigine are the other agents which can be helpful in neuropathic pain.

Resource
1. Rana AQ: A Synopsis of Neurological Emergencies. Authorhouse, Bloomington, Indiana, 2009. 51–68.

Answered by: Dr. Abdul Qayyum Rana

22. Managing Diabetes through Diet

How can a patient change his or her diet to help control his/her diabetes mellitus? What should he avoid? What should he consume?

Submitted by: Sarah Schmidt, MD, Toronto, Ontario

In general, most patients can control their diabetes mellitus better if they follow these simple rules: eat three meals (including breakfast) per day at regular times with healthy snacks in between (*e.g.*, fruits and vegetables); limit sugars and sweets (regular pop, desserts, candies, jam and honey); limit the amount of high-fat food, such as fried foods, chips and pastries; and eat more high-fibre foods, such as whole grain breads and cereals, lentils, dried beans and peas, brown rice, and vegetables and fruits. Have a glass of skim or 1% milk to complete your meal. Alcohol can affect blood glucose levels and cause you to gain weight, so it must be consumed in moderation, or eliminated from your diet completely. Include fish, lean meats, low-fat cheeses, eggs, or vegetarian protein choices as part of the meal. All people with diabetes should also receive advice on nutrition from a registered dietitian. Of course, it is important to take into consideration the cultural background with respect to the dietary intake. In addition to diet, regular physical activity is important along with medications if necessary.[1]

Reference
1. Canadian Diabetes Association: 2008 Clinical Practice Guidelines. Canadian Diabetes Association Diabetes Care, 2009; 32(7): n.p.

Answered by: Dr. Ally Prebtani

23. Treatment and Prevention of Keloid Scars

What is the best way to treat a keloidal scar to make it shrink and disappear completely? Is there any way to prevent keloid scarring in the first place?

Submitted by: Gary Paul Stephan, MD, Scarborough, Ontario

Keloids represent an excessive dermal fibrotic response, usually to cutaneous surgery, trauma or inflammation. Treatment of keloids can be difficult and multiple modalities have been used to treat keloids for their bothersome cosmetic appearance as well as symptomatic treatment of pain and itching. Treatments include intralesional corticosteroids, a variety of silicone products, including silicone sheets and gels, pressure therapy, topical 5% imiquimod cream, cryosurgery, surgical excision, laser therapy, and radiation. Other less frequently used options include intralesional interferon–alpha–2b, intralesional 5 fluorouracil, and intralesional bleomycin.

Multiple treatments are often necessary to shrink keloids, though they do not generally disappear completely, but they do flatten out. In my opinion, the best treatment for keloids is intralesional corticosteroids (usually triamcinolone acetonide) injected in a concentration of 10 to 20 mg/cc directly into the keloid and repeated at monthly intervals. Potential side-effects include excessive atrophy and depigmentation.

Considerations in preventing keloids include avoiding unnecessary surgery (especially cosmetic) in patients known to be predisposed to keloids, such as darker skinned patients, and in locations that are more prone to keloid, such as the anterior chest, upper back, and shoulder areas. If surgery is felt to be necessary and the patient is a known keloid former, consideration can be given to using prophylactic intralesional corticosteroid injections immediately after the surgical procedure, as well as applying silicone sheets or 5% imiquimod cream following surgery in addition to immediate application of pressure to the surgical sites.

Answered by: Dr. Richard Haber

24. Cardiac CT and Stress CMR

What are the basic differences of cardiac CT and stress CMR and the clinical indications for cardiac CT and stress CMR? What are their sensitivities, specificities, and safety issues?

Submitted by: Gary Paul Stephan, MD, Scarborough, Ontario

Cardiac CT provides detailed information about coronary artery anatomy and atherosclerotic disease. A beta-blocker is usually given to ensure that the heart rate is slow enough for adequate acquisition of images of the entire course of the arteries. It does not provide direct information about myocardial ischemia. A patient may have significant coronary artery disease but not have any ischemia because of collateral blood supply. There is significant radiation exposure with coronary CT angiography (similar to coronary angiography or radiofrequency ablation); however, recent techniques and instrumentation have made major improvements in the amount of radiation exposure. CT angiography requires the use of 60 to 120 mL of iodinated contrast and may cause acute kidney injury. CT angiography is not accurate if there is extensive coronary artery calcification or to detect coronary stent stenosis. It is best utilized in symptomatic patients with an intermediate likelihood of coronary artery disease who have equivocal stress test results.

Stress CMR with dipyridamole (or adenosine or dobutamine) does not involve any radiation and has a higher sensitivity and specificity for detection of myocardial ischemia than stress echocardiography (85 to 90%). The use of gadolinium for late enhancement is very useful for detection of infarction. Ischemia is detected by visualization of pharmacologically induced wall motion abnormalities. The detail of the coronary anatomy is not as good as with CT angiography; although, cardiac MR is useful to detect congenital coronary abnormalities and coronary aneurysms. Gadolinium should not be given to patients with significant renal dysfunction (glomerular filtration rate < 30 ml/min) because of the risk of nephrogenic systemic fibrosis.

Answered by: Dr. Bibiana Cujec

25. Onset of Celiac Disease Symptoms

Can celiac disease show up later in life, when patients have completely new symptoms? Are people born with it, or can they develop it at any time?

Submitted by: Christine Gibson, MD, Calgary, Alberta

Celiac disease, celiac sprue, or gluten-sensitive enteropathy is a relatively common disease affecting 0.5 to 1% of the North American and European populations. Although it is classically diagnosed in children, it is being increasingly diagnosed in adults, and about 20% of cases are diagnosed in patients over 60 years of age. Some patients, despite being diagnosed in adulthood, have had symptoms for many years predating diagnosis, but many have not.

Celiac disease is an autoimmune condition with a genetic basis, triggered by gluten, an environmental factor. Thus, like other autoimmune conditions, people are born with gluten-sensitivity and, thus, do not develop or out-grow the disease. However, the symptoms associated with gluten-sensitive enteropathy are so varied both in presentation and in severity that many people with the disease are not diagnosed until much later in life.

The classic symptoms of diarrhea and abdominal distension/bloating are absent in approximately half of all patients with celiac disease. Iron-deficiency anemia is now the most common presentation. Patients can also present with evidence of other deficiencies, such as B12, folate, vitamin K, and vitamin D. Nonspecific symptoms, including fatigue, recurrent aphthous stomatitis, fractures, arthralgias, infertility, and psychiatric syndromes can also be the sole complaint. In children, impaired growth, pubertal delay, rickets, poor dentition, and behavioural issues should alert the physician to consider celiac disease, among other diagnoses.

For patients with associated conditions, such as dermatitis herpetiformis, IgA deficiency, type 1 diabetes, autoimmune thyroid disease, Down's syndrome, IgA nephropathy, microscopic colitis, rheumatoid arthritis, and Sjogren's syndrome, physicians should have a low threshold to test for gluten-sensitive enteropathy.

Resource

1. Farrell RJ, Kelly CP: Celiac Sprue. N Engl J Med 2002; 346(3):180–8.

Answered by: Dr. Robert Bailey and Dr. Carrie Ye

26. Venous Insufficiency in Pregnancy

Venous insufficiency causes aching legs. Why is this discomfort exacerbated during pregnancy (previous venous obstruction stage) and menstruation?

Submitted by: Michele Burns, MD, Calgary, Alberta

Impaired venous outflow from the lower extremities may be due to a number of alterations in venous function, including failure of the venous pumping mechanisms, loss of vein wall elasticity, the presence of obstructive lesions within the venous outflow tract, and vein valve incompetency. The etiology of venous insufficiency may be multifactorial, but valvular incompetence appears to be the most common pathway.

Being female and pregnant are known factors associated with venous insufficiency. Many have attributed the onset of varicose veins to pregnancy. The function of the valves may be impaired by distant problems, such as venous outflow obstruction that may occur with pregnancy. However, the belief that the pressure of the uterus obstructs venous flow is debatable. Varicose veins often develop during the first trimester prior to significant uterine enlargement and can disappear after birth.

The evidence relating to varicose veins is slightly inconsistent and may be biased in the early studies, which do not account for age. It is unclear whether the mechanism by which pregnancy has its effect is directly responsible for vericose viens or is simply an accelerator of the condition in susceptible individuals. Hormonal changes likely contribute to vericose veins through vasodilatation, which would explain menstrual exacerbation of venous insufficiency, but there are no studies that verify this mechanism.

Resources

1. White JV, Ryjewski C: Chronic Venous Insufficiency. Perspect Vasc Surg Endovasc Ther 2005; 17(4):319–27.
2. Fowkes FG, Evans CJ, Lee AJ: Prevalence and Risk Factors of Chronic Venous Insufficiency. Angiology 2001; 52(Suppl 1):S5–15.

Answered by: Dr. Victoria Davis

27. Slowing Parkinson's Disease

What treatment is best at slowing the progression of Parkinson's Disease?

Submitted by: Albert Hausfather, MD, Montreal, Québec

Currently available therapies for the medical management of Parkinson's disease are mainly helpful only in improving the symptoms of the disease. There are no pharmacological agents definitely known to slow down the neurodegenerative process involving dopaminergic neurons, which is the main pathological abnormality in Parkinson's disease. As the underlying neurodegenerative process continues, the symptoms of this condition show progression with time. The availability of the neuroprotective agents remains an unmet need at this time. There have been some reports about the possible role of different pharmacological agents, such as rasagiline, in slowing down the progression of this disease; however, there is no uniform consensus among the experts in this field.

In the ADAGIO study, a clinical trial with rasagiline, which is a MAOB-inhibitor, the group of patients with early treatment did better than the late treatment group. A total of 1,176 patients with untreated Parkinson's disease were enrolled in this study. The objective was to examine the possibility that rasagiline might have a disease-modifying effect. These patients were randomly assigned to receive 1 mg or 2 mg per day of rasagiline for 72 weeks or placebo for 36 weeks followed by either dose of rasagiline for 36 weeks. It was found that the group who received rasagiline 1 mg per day for the full 72 weeks did better as compared to the group which was started on placebo. However, these findings were not seen in the group who received 2 mg dose for 72 weeks. Since the two doses were associated with different outcomes, the study results were interpreted with caution by the experts in the field. However, one explanation of the failure to get similar results with the 2 mg dose may be due to the greater symptomatic effect at the higher dose of rasagiline, which might have masked the underlying disease-modifying effect. Also, the subgroup analysis of the most severely affected patients receiving rasagiline 2 mg per day in the study did show positive effects.[1] However, there still remains a difference of opinion among the experts about the role of any pharmacological agent as a definitive neuroprotective therapy.

Reference

1. Olanow CW, Rascol O, Robert H, *et al*: A Double-Blind, Delayed-Start Trial of Rasagiline in Parkinson's Disease. N Engl J Med 2009; 364(19):1268–1278.

Answered by: Dr. Abdul Qayyum Rana

28. Lower Extremity Deep Vein Thrombosis (DVT)

Do DVT below, and not involving, the popliteal vein(s) need anticoagulation treatment? What criteria for treatment? Would treatment change if the patient had a first degree relative with previous DVT?

Submitted by: Kenneth Ng, MD, Langley, British Columbia

Lower extremity deep venous thrombosis (DVT) present acutely and can progress to pulmonary embolism (PE) that may be life threatening. It is important to distinguish a proximal DVT from a distal one, as the management is different. A proximal DVT of the lower extremity is defined as a thrombus at or above the trifurcation of the popliteal veins. Patients with proximal DVTs require therapeutic anticoagulation, as the risk of PE is high. In contrast, we do not treat distal DVTs with anticoagulants, as the risks of progression to proximal DVT, as well as PE, are relatively low. We treat these patients with anti-inflammatory drugs (NSAIDS) and perform a repeat compression Doppler-ultrasound in one week to monitor for progression to a proximal DVT. There is controversy surrounding the management of distal DVT and some thrombosis clinics treat these patients with a short course (six weeks to three months) of anticoagulation therapy.

Distal DVTs should still be managed as above if the patient has a first-degree relative with a DVT. If the patient develops a proximal DVT, the family history may warrant investigation for an inherited thrombophilia, which may influence the duration of anticoagulation therapy.

Answered by: Dr. Cyrus Hsia and Dr. Leonard Minuk

29. Fatigue in Women and Low Serum Ferritin

In my workup of fatigue in women, I add in a serum ferritin and inevitably this value returns low (*i.e.*, < 12, where normal levels are 12 to 150 ng/mL), with a normal HGB. Is this significant?

Submitted by: Katherine Abel, MD, Leduc, Alberta

Unfortunately, the causes of fatigue are numerous and an incidental finding of a low ferritin without anemia, called an iron depleted state, may not be an explanation for this. However, there are some individuals that do have fatigue with an iron depleted state and have a hemoglobin within the normal reference ranges. The anemia of iron deficiency and microcytosis is usually a later presentation of an extended period of negative iron balance. Thus, fatigue may present along the spectrum of iron deficiency anemia, and we would recommend replacing the iron stores.

It is important to remember that iron depletion or iron deficiency anemia are not diagnoses but, rather, syndromes or outcomes due to some underlying cause. There are many physiologic and pathologic causes of iron depleted states and iron deficiency anemia. Physiologic responses to rapid growth, such as those during infancy and adolescence, may require iron supplementation. For women, physiologic states of pregnancy and lactation often require further supplementation. Further, for premenopausal women, heavy menstrual periods should be quantified for the degree of bleeding, as this is the most common cause of iron depletion. For postmenopausal women and all men, a source of blood loss should be investigated, particularly in the gastrointestinal tract.

In conclusion, an incidental finding of low ferritin without anemia or an iron depleted state is significant and should be managed with iron supplementation. We recommend initial treatment be with oral replacement. Other than replacing the iron, it is important to identify and manage the underlying cause or causes. It is unlikely that correction of the iron depleted state will resolve the patient's complaint of fatigue and other avenues should be sought.

Answered by: Dr. Cyrus Hsia and Dr. Leonard Minuk

30. Red Dye Reactions

Please comment on red dye reactions in children.

Submitted by: Michael Keating, MD, St. John, New Brunswick

First, potential reactions to food dyes are for the most part not IgE (true allergic type) reactions, so they are sometimes classified as food intolerances rather than food allergies. Colour additives are available for use in food as either "dyes" or "lakes." Dyes dissolve in water and are manufactured as powders, granules, liquids, or other forms. They can be used in beverages, dry mixes, baked goods, confections, dairy products, pet foods, and a variety of other products. Insoluble forms of dyes ("lakes") are found in coated tablets, cake and donut mixes, hard candies, and chewing gums.

The relationship between ingestion of various food dyes (*e.g.*, tartrazine) and urticaria was noted in a small number of patients in early studies that were poorly controlled.[1,2] A common problem was that the patients studied suffered from chronic urticaria, and antihistamines used to control symptoms were withheld during study protocols. More recent studies in the 1980s and 90s revealed a lack of association. Tartrazine and other azo dyes were shown to provoke urticaria in only the very occasional patient. Carmine (a food dye used in many different products such as juices, ice cream, yogurt, and candy) and annatto have rarely been reported to cause severe allergic reactions and anaphylaxis.

Patients with ASA-exacerbated asthma were advised in the past to avoid products containing tartrazine (FD&C Yellow #5) because of a notion that tartrazine was cross-reactive with aspirin. Current evidence does not support this.

Beyond allergy, food additives have been seen as a contributing factor to behavioural problems in kids, especially those with ADHD. This was popularized back in the 1970s with the popular Feingold diet. Subsequent blind studies looking at this relationship did not support a consistent relationship between diet and behaviour. However, two more recent studies looking at food colouring and sodium benzoate showed a mild, but significant, increase in hyperactivity in children during the week when they consumed drinks with artificial colours, with an effect size of about 10%.[3] This led the UK's Food Standards Agency to urge manufacturers to remove six artificial colouring agents from food marketed to children in Britain. A 2004 metanalysis of 15 double-blind placebo controlled trials showed a small effect based on outcomes of standardized rating forms as well as nonvalidated author-developed scales.[4]

Problems with different outcome measures (*e.g.,* parent and teacher reporting; scale vs. no scale), different amounts of food colourings, and different colourings make interpretation of these studies difficult. It may be that there are some children who are susceptible to food colourings. However, this subpopulation, and the effect size itself, are both likely to be very small.

References

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Answered by: Dr. Tom Gerstner

31. When to Stop Taking the Oral Contraceptive Pill

When is the best time to stop the oral contraceptive pill (OCP) in a perimenopausal woman who is otherwise healthy?

Submitted by: Romi Rajput, MD, Edmonton, Alberta

Low dose combined hormonal contraceptives (CHC) can be used up to age 52 in healthy perimenopausal women. Then discontinuation should be discussed, with or without transition to conventional hormone replacement therapy, to decrease the return of hot flushes associated with abrupt withdrawal of estrogen. Low dose CHC are an excellent choice for perimenopausal symptoms, as they have the additional benefit of regulating menses whereas traditional hormone replacement therapy in perimenopause tends to make uterine bleeding more chaotic.

Answered by: Dr. Victoria Davis

32. Virtual Colonoscopy

Is virtual colonoscopy (CT Scan) a good alternative to real colonoscopy for detection of polyps in the context of non-availability of the second?

Submitted by: André Vedonneau, MD, Jolicouer, Québec

Virtual colonoscopy, or CT colonography, is an emerging technology that has been proposed as both an adjunct to and alternative for conventional colonoscopy. It has already had an immediate impact as a substitute for barium enema and incomplete conventional colonoscopy. Its possible application as an alternative modality for average risk patients is still evolving, but this avenue is where much of its appeal and potential lie. Established advantages include the ability to fully evaluate the colon in almost all patients, noninvasiveness, patient comfort, high patient compliance rates, and safety. There are some well-founded disadvantages to this technology. First, and foremost, is the intrinsic risk of exposure to ionizing radiation, but other concerns include its slight inferiority to conventional colonoscopy as a detection test (multiple studies have demonstrated sensitivity and specificity numbers that are almost as good), the lack of therapeutic potential, and its limitations for high risk patients. A particular issue of debate is its utility in the detection of extracolonic findings. A proportion of findings will be of clinical value, but this aspect of CT colonography is more akin to total-body CT screening, which has been widely criticized. The management of incidental findings presents a dilemma from the perspective of both eliminating diagnostic uncertainty and the cost effectiveness of pursuing streams of investigations which will often bear only questionable fruit. The overall consensus is that virtual colonoscopy, as an alternative first line screening modality, is evolving rapidly as a technology, but is currently best applicable only in those patients that are unwilling or unable to undergo conventional colonscopy.

Answered by: Dr. Robert Bailey and Dr. Angus Kim

33. Bipolar Mood Disorder vs. Borderline Personality Disorder

What are some tips for differentiating between bipolar and personality disorder?

Submitted by: **Edwin Frankzak, MD,** Toronto, Ontario

The most problematic and common scenario is differentiating between borderline personality disorder and a bipolar mood disorder, usually bipolar type II. A positive family history of bipolar disorders is a reliable guide to differentiating between the two. However, we should bear in mind that patients with borderline personality disorder, or any other type of personality disorder, may also suffer from a bipolar disorder. For that reason, it is generally preferable to diagnose mood disorders, at the expense of personality disorders, because giving a personality disorder diagnosis to a person with a bipolar disorder may lead to a neglect of the bipolar disorder or, perhaps, half-hearted treatment of the bipolar disorder. Dx

Answered by: **Dr. Hany Bissada**