



Sciatica Symptoms in Pregnancy

1.

What is the best advice for a pregnant lady with sciatica symptoms?

Question submitted by:
Dr. Morag E. Goldie
Calgary, Alberta

Sciatica, defined as nerve pain radiating from the buttocks unilaterally down one leg ending in the foot, affects < 1% of pregnant women. This is considered an emergency and medical attention with an orthopedic or neurosurgeon should be sought. It may be due to a herniated disc or less commonly uterine pressure on the sciatic nerve. More commonly, up to 70% of pregnant women experience some form of back discomfort which may increase with advancing gestation. Severe back pain should be investigated

to rule out disc disease, various forms of arthritis or pregnancy associated osteoporosis. Back pain can be reduced by having women squat when lifting, using a pillow for support when sitting and avoiding high-heeled shoes. Muscular spasm and tenderness due to acute strain or inflammation responds well to rest, heat and analgesics.

Answered by:
Dr. Cathy Popadiuk

An Intolerance to Lactose After Pancreatic Problems

2.

A 53-year-old woman who has had partial pancreatectomy, gall bladder and spleen is now intolerant of cheese. Can we develop lactose intolerance after pancreatic disease or surgery?

Question submitted by:
Dr. John Brighton
Parksville, British Columbia

The causes of lactose malabsorption include racial or ethnic lactose malabsorption, developmental lactase deficiency, congenital lactase deficiency, bacterial overgrowth or villous atrophy.

In North America, lactase activity is normal in all healthy children of any racial or ethnic group. Lactose intolerance starts to develop after five-years-of-age and is less common in Caucasians. The frequency of

lactose intolerance increases with age. About 80% of Africans are affected by 50-years-of-age and 20% of Caucasians. Acquired causes of lactose intolerance include bacterial overgrowth or it can be seen with any form of mucosal injury of the GI tract that causes villous atrophy.

Answered by:
Dr. Jerry McGrath



Yearly Fecal Occult Blood Test

3.

Does a patient > 50-years-old need a yearly fecal occult blood test (FOBT) if the patient already had a normal colonoscopy?

Question submitted by:
Dr. Joan Nhan
Toronto, Ontario

Colonoscopy is the best test to prevent colorectal cancers and deaths; it can find most polyps and cancers. Colonoscopy has the added benefit that lesions can be removed during the same procedure. There are limitations to colonoscopy including the need for sedation, risk of perforation, post-polypectomy bleeding and incomplete examination.

Annual or biennial screening with a FOBT reduces the incidence and mortality rate from colorectal cancer as well. However, only 2% of patients with a positive test have cancer. Thus, for every

patient with cancer, about 50 patients are subjected to anxiety. FOBT is not designed for the detection of polyps since polyps usually do not bleed. Thus, when colonoscopy is performed for screening and a technically adequate examination occurs with a good bowel preparation, additional screening with FOBTs is not indicated.

Answered by:
Dr. Jerry McGrath

Asymptomatic Pneumonia

4.

Why do some large pneumonias show no signs of fever, cough or sputum?

Question submitted by:
Dr. Maurice O'Neil
Collingwood, Ontario

Some of this problem is simply statistical. There is no element of the history or physical examination that predicts the presence or absence of pneumonia with any great accuracy. The prevalence of pneumonia in patient populations presenting to EDs or ambulatory clinics with acute respiratory illnesses is only about 5%. The absence of fever diminishes this to < 4%. Without fever or cough, the prevalence drops to around 1%. Who are the few that have pneumonia without fever or

cough? In general, it is those with a suppressed inflammatory response, whether due to age, debility, or medications. There will always be those rare cases who do not respond in the usual fashion for unclear reasons. Doubtless we will one day clarify some currently obscure defects in the inflammatory cascade which account for these phenomena.

Answered by:
Dr. Michael Libman

5.

Treating Congestive Heart Failure in the Elderly

What is the approach to treat new onset of congestive heart failure (CHF) among the very elderly (i.e., among ≥ 90 -years-old ?)

Question submitted by:

Dr. Dennis Kunimoto
Edmonton, Alberta

HF is currently the most common hospital discharge diagnosis in patients > 65-years-old. Elderly patients with heart disease and failure are more likely to be frail and cognitively impaired and are more likely to require home care, hospitalization, or institutionalization and have an increased mortality. Cognitive impairment in HF is common and multifactorial. Older patients with CHF are more likely to present with atypical symptoms, such as:

- delirium,
- functional decline,
- falls,
- immobility,
- nocturia and
- nocturnal incontinence.

Many elderly patients with HF (> 40% to 50% in some series) have preserved left ventricular systolic function (diastolic HF). The goals of HF management include alleviation of symptoms, prevention of progression of disease and hospitalization and where possible, maintenance of functional capacity and improvement in life expectancy. All elderly patients with a diagnosis of HF should have a well-documented social history including their home environment, their caregivers and their response to an emergency.

The basic investigations and medical management for HF do not significantly differ in the older patient. The appropriateness of referral for invasive investigations for coronary or valvular heart disease must be individualized. The decision must not be based on a consideration of chronological age alone, but should be based on an estimation of active life expectancy, anticipation of benefit and the risks associated with the intervention.

Resource

1. Malcolm Arnold. 2002 Canadian Cardiovascular Society Consensus Conference: Management Of Heart Disease In The Elderly Patient—Heart Failure. http://www.ccs.ca/download/consensus_conference/consensus_conference_archives/2002_05.pdf. Last accessed 10 July 2009.

Answered by:

Dr. Chi-Ming Chow

(Anti-inflammatory analgesic agent with a mucosal protective agent.)
Arthrotec* is contraindicated in pregnancy. Product Monograph available on request.

ARTHROTEC[®] 50 & 75 mg diclofenac sodium and misoprostol tablets





Probiotics for Children

6. Are probiotics currently recommended for children beginning antibiotics who have previously suffered from antibiotic associated diarrhea?

Question submitted by:
Ian R Bell
Newmarket, Ontario

The use (and misuse) of probiotics is a very topical issue and while probiotics have a great deal of promise for many conditions, the optimal agent(s) and conditions remain to be defined. In the case of antibiotic-related diarrhea in children, there is actually a reasonable body of evidence that suggests that probiotics have a role in the resolution of this problem.

A meta-analysis of six trials with a combined total of > 800 children published in the Canadian Medical Association Journal in 2006, suggested that children who received a probiotic with an antibiotic had less diarrhea than those who did not. While the authors believe that the evidence is not strong enough to recommend routine use of probiotics concurrently with antibiotics, there would seem to be a

rationale for the use of a probiotic in a child with antibiotic-associated diarrhea. It should also be noted that this approach seemed to be safe. The analysis also suggested better results with higher doses of probiotics such as *Lactobacillus* GG, *Lactobacillus sporogenes*, or *saccharomyces boulardii*. This points to the importance of selecting appropriate probiotic products. It should be emphasized that not all products labelled probiotics have equivalent activity and some care should be taken in terms of selection of an appropriate agent.

Resource

1. Johnston BC, Supina AL, Vohra S: Probiotics For Pediatric Antibiotic-Associated Diarrhea: A Meta-Analysis Of Randomized Placebo-Controlled Trials. CMAJ 2006; 175(4):377-83.

Answered by:
Dr. Michael Rieder

Best Insulin Regimen

7. What is the best insulin regimen for steroid-induced Type 2 diabetes mellitus?

Question submitted by:
Dr. Wayne Sullivan
Halifax, Nova Scotia

As far as I know, there have not been any studies done which have answered this specific question. The insulin regimen will need to be individualized. If the fasting glucose level is elevated, they may get by with a basal insulin such as isophane insulin suspension (NPH), insulin detemir or insulin glargine at bedtime. If there is a component of significant

postprandial hyperglycemia, one can try either a pre-mixed insulin (30/70, Mix 25, Mix 30, Mix 50, etc.) two to three times daily. Multiple dose insulin regimen using rapid acting insulin with meals and basal insulin at bedtime is another reasonable option.

Answered by:
Dr. Hasnain Khandwala



Arrhythmia in a Patient With an Eating Disorder

8.

How do you manage arrhythmia in a young female with an eating disorder (anorexia nervosa)?

Question submitted by:
Dr. Ben Pangilinan
Thornhill, Ontario

Anorexia nervosa has been associated with QT interval prolongation and heart failure. A variety of ECG abnormalities can be seen among patients with anorexia nervosa, including sinus bradycardia, sinus tachycardia, low voltages, U waves, conduction abnormalities and QT prolongation. A prolonged QT interval is a marker for arrhythmias and sudden death and warrants immediate attention in a bradycardic and underweight patient. The severely underweight anorexic who has electrolyte abnormalities due to vomiting, laxative abuse, or bizarre eating habits is at heightened risk

for significant cardiac arrhythmia or cardiac arrest.

The risk of heart failure in patients with an eating disorder is greatest in the first two weeks of refeeding. The combination of reduced cardiac contractility and refeeding edema may account for this finding. This risk is reduced by slow refeeding, repletion of phosphorus, avoidance of a high sodium intake and slow rehydration when IV fluids are needed.

Answered by:
Dr. Chi-Ming Chow

Causes of Blue Sclera

9.

What are the possible causes of blue sclera teeth, nails and skin in an otherwise healthy 50-year-old female?

Question submitted by:
Dr. Barbara Corbeil
Orangeville, Ontario

The onset of a blue discoloration in all these tissues at a mature age in a healthy patient is usually associated with a drug-induced cause. The most common trigger we see in dermatology is chronic minocycline ingestion. This is not rare since chronic doses (sometimes for years) for rosacea control may be encountered. Minocycline can cause this type of pigmentary

change in all tissues including liver and thyroid. Other causes of blue skin (cyanosis, methemoglobinemia, etc.) and/or sclera (Ehlers-Danlos syndrome, osteogenesis imperfecta) do not tend to discolour teeth as well.

Answered by:
Dr. Scott Murray

Diagnosing Post-Head Injury Seizures

10.

How would you diagnose post-head injury seizure?

Question submitted by:

Dr. Khin Myat
Melfort, British Columbia

The risk of seizures increases threefold in patients with head trauma compared to the general population and accounts for 5% of all epilepsy. Post-traumatic seizures can occur early after the trauma (within one to two weeks) or late (occurring once the patient has fully recovered from the effect of the head injury). The risk of post-traumatic seizures is directly related to the severity of the injury.

Early seizures occur in 2% to 5% of head trauma patients and are more common in children. In late post-traumatic seizures, 60% develop within a year of the injury but can occur many years after the insult. In patients with early seizures, late seizures are

common and may be seen in 25% to 35% of subjects. Presentation includes simple seizures, partial complex seizures, or secondary generalized seizures. Diagnostic evaluation must include brain imaging, especially with early post-traumatic seizures to look for intracranial or sub-dural hemorrhage. The treatment for seizure management is no different from management of epilepsy from any etiology. In patients who present with early seizures, supportive care to ensure that oxygenation to the brain is not compromised is very important.

Answered by:

Dr. Ashfaq Shuaib

Lowering Blood Sugars

11.

Other than nocturnal insulin injections, what is the best way to lower high (six to eight) fasting blood sugars when the diabetic's glycosylated hemoglobin (HbA1c) is < 7.0% (< 0.70) and good?

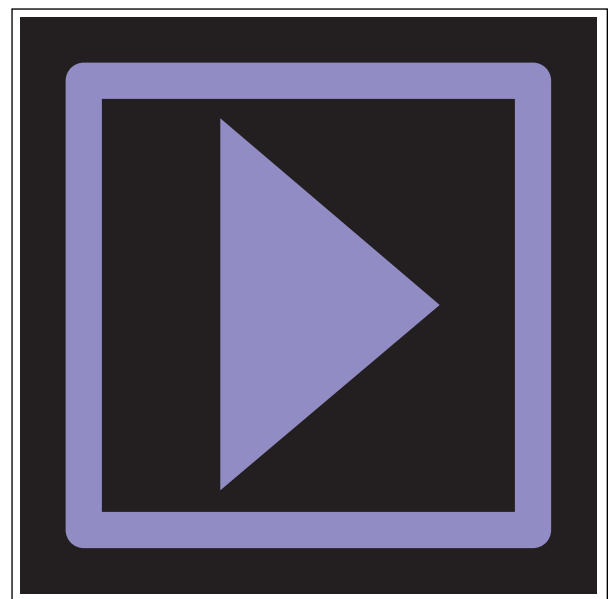
Question submitted by:

Dr. Paul Stephan
Thornhill, Ontario

Isolated elevated fasting glucose levels between 6 mmol/l to 8 mmol/l in the presence of a normal HbA1c are not necessarily associated with adverse outcomes. Thus, in the case of the patient with an HbA1c of < 7%, I do not feel that any changes would be indicated or needed. Further intensification of treatment will most likely increase the risk of hypoglycemic episodes, which, as we have recently learnt from studies such as Action to Control Cardiovascular Risk in Diabetes (ACCORD) and Veteran's Affairs Diabetes Trial (VADT), may cause more harm than good.

Answered by:

Dr. Hasnain Khandwala





Male Hypogonadism and Depression

12.

How often is male hypogonadism associated with depression?

Question submitted by:
Dr. Danielle Ouellet
La Malbaie, Quebec

The causes of male hypogonadism may be primary or secondary in nature. Primary causes include genetic conditions (e.g., Klinefelter's syndrome), age, medications, acquired disorders (surgery or trauma to the testes) and systemic disease states such as chronic renal failure or hepatic cirrhosis as a partial list. Medications that may be implicated in the primary cause of male hypogonadism include spironolactone, ketoconazole, anticonvulsants, alcohol or marijuana. Secondary causes include chronic illnesses (diabetes, anorexia), infections (HIV), aging, hyperprolactinemia (seen with risperidone and other antipsychotics), sex steroid hormones or opiates or androgen excess (endogenous or exogenous).

Signs and symptoms of male hypogonadism include, but are not limited to, a low serum testosterone level < 300 ng/dl plus one or more clinical symptoms. These clinical symptoms would be erectile dysfunction, changes in sexual function, decreased energy, depression, irritability and cognitive changes in part.

Herein lies the link to depression and male hypogonadism. Assessing the patient from a

bio-psycho-social overview (as social drugs, alcohol, marijuana and steroid use are implicated) is essential. Determining whether or not there are risk factors, including medications come into play. Also, a laboratory work-up to determine serum prolactin and testosterone levels plus liver function tests, serum creatinine and serum luteinizing hormone and follicle stimulating hormone is part of the differential diagnosis.

Using that multifactorial approach of history (patient and collateral) with laboratory results will help determine the treatment options for the depressed patient. It also provides the treating team with important educational tools for the patient and family including social ingestion (marijuana and alcohol) and medication pitfalls.

Resources

1. Seftel A. Male Hypogonadism. Part II: Etiology, Pathophysiology, and Diagnosis. Medscape. May 2006. <http://www.medscape.com/viewarticle/531722> (Accessed July 31/09).
2. Felig P, Frohman LA: Endocrinology & metabolism 4th Edition. McGraw-Hill Professional. 2001 pp 665-668.

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Answered by:

Prof. Joel Lamoure