



Is testing blood sugar after meals necessary?

1.

Is there any value in asking diabetic patients to test their blood sugar levels within two hours of a meal?

Question submitted by
Peter Mucalov, MD
Queensville, Ontario

Post prandial hyperglycemia (PPH) is usually the earliest glycemic abnormality seen in patients with Type 2 diabetes. PPH has been found to be more closely related to cardiovascular disease than fasting hyperglycemia.

Answered by:
Hasnain M. Khandwala, MD,
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One clue to the presence of PPH is an elevated HbA1c in a patient with decent fasting and pre-meal blood glucose levels. The 2003 Canadian Diabetes Association guidelines now recommend monitoring and treating PPH. Ideally, two-hour post-meal blood glucose levels should be < 7.8 mmol/L. There are a number of pharmacologic agents that specifically target PPH—acarbose, repaglinide, nateglinide, and the insulin analogues, lispro and aspart.

This month—10 Answers:

1. Is testing blood sugar after meals necessary?
2. How do you diagnose psychotic depression?
3. When should patients have botulinum toxin injections?
4. All about mild aortic stenosis
5. When do you treat high uric acid?
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2.

How does one make the diagnosis of psychotic depression requiring antidepressants in patients with dementia?

Question submitted by
Sam Greenspan, MD
Toronto, Ontario

Major depressive disorder (MDD) may be challenging to assess in dementia, but is actually a common and perplexing problem. While the best diagnostic scale for detecting depression in dementia is the Cornell Scale for Dementia in Depression (CSDD), the Geriatric Depression Scale (GDS) can also be used reliably in mild-to-moderate dementia (mini-mental status examination >15).

Psychotic depression frequently involves delusional themes of various somatic complaints, nihilism, poverty, and guilt. Psychotic MDD in dementia can be further complicated by presentations of extreme agitation, aggression, apathetic or withdrawal states, and active or passive suicidal behavior seen as refusal to eat and drink. These patients are often resistant to monotherapy with antidepressants or antipsychotics and others need a combination of both and/or electroconvulsive therapy.

Answered by:
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3.

When should patients have botulinum toxin injections?**Could you outline the uses of botulinum toxin injections for musculoskeletal problems and myofascial pain?**

Question submitted by
Dr. Don Newhouse, MD, CCFP
Kamloops, British Columbia

Small studies have supported the use of botulinum toxin (BTX) in piriformis syndrome, unilateral or lateralizing chronic low back pain, and chronic lateral epicondylar pain.

The use of BTX in myofascial pain appears to be effective in appropriately selected patients as a part of a comprehensive treatment plan. BTX injections are also being used in treating some patients with temporomandibular joint pain and thoracic outlet syndrome. Muscular pain associated with cervical dystonia can be successfully treated with BTX.

Until further studies are completed, BTX should be utilized after standard treatment has failed and should be performed by physicians with clinical expertise in the diagnosis and treatment of underlying disorders.

Answered by:
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4.

All about mild aortic stenosis

For a 55-year-old female with clinically mild aortic stenosis:

1. Echocardiogram is negative for stenosis, yet cardiologist still made this diagnosis. Is a false negative echo a possibility?

2. For mild asymptomatic aortic stenosis—is it safe for the patient to be on an ACE inhibitor?

Question submitted by
Mary Johnston, MD
Sioux Lookout, Ontario

A false negative echocardiogram for aortic stenosis, while uncommon, can occur. The common cause is due to technically difficult studies where adequate views of the valve and measurement of the doppler velocity across the valve is not possible.

Vasodilators have been traditionally contraindicated in patients with severe aortic stenosis because of the fear of reduction in systemic vascular resistance in the face of a fixed cardiac output that could theoretically result in decreased cerebral perfusion and syncope.

However, a recent study of nitroprusside infusion in a small population of critically ill patients with severe aortic stenosis and heart failure showed improvement in cardiac index, symptoms, and better survival to aortic surgery.¹ While this suggests treatment with oral vasodilatation therapy may be safe, doses should be gradually titrated upward.

References

1. Zile MR, Baasch WH: Heart failure in aortic stenosis—improving diagnosis. *N Engl J Med* 2003 May; 348(18):1735-6.

Answered by:
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5.

When do you treat high uric acid?**Do you treat patients with high uric acid and no symptoms/gout?**

Question submitted by
John Vu, MD
Oshawa, Ontario

The essence of this question is whether a high uric acid is either pathologic or predates a clinically important disease process. To date, there is no definite evidence that this is the case. Not all patients with hyperuricemia will develop clinical gout. In this context, modifiable factors (*i.e.* high alcohol intake, obesity, or use of thiazide diuretics) may influence onset of gout.

Pharmacologic treatment is indicated for patients with uncontrolled gouty attacks, tophi, radiographic bony erosions, or renal calculi. Treatment should thus be earned. While causality is yet to be clarified, recent evidence suggests an association of hyperuricemia and hyperlipidemia, as well as a possible link with hypertension and coronary artery disease.

Answered by:
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6.

What about night sweats?

Are there any good treatments to manage night sweats caused by selective serotonin reuptake inhibitor (SSRI) antidepressants?

Question submitted by
Martha Macdonnell, MD
Cochrane, Alberta

While nocturnal sweating (NS) is a commonly observed adverse reaction in clinical trials involving SSRIs, it remains under-reported and poorly studied in clinical practice. Although NS has been reported with all antidepressants, it is less frequent and less persistent with SSRIs than with tricyclics.

Paroxetine seems to have a higher incidence of NS than with other SSRIs. Persistent NS can be distressing and uncomfortable, resulting in poor compliance. Therefore, appropriate management is essential for successful SSRI maintenance treatment.

It is important to rule out NS due to:

- nocturnal panic attacks,
- sleep problems,
- post-menopausal symptoms,
- substance abuse and withdrawal,
- SSRI discontinuation syndrome, and
- serotonin syndrome.

Other differential diagnoses include obesity, antihistamine use, diabetic hypoglycemia, and thyrotoxicosis.

Since the pathophysiologic mechanisms and risk factors of NS remain unclear, evidence-based treatment approaches are limited.

Common management strategies used in clinical practice include:

- lowering the dose of SSRI;
- reassurance/supportive counselling, as NS may be self-limiting in some patients;
- short-term treatment with small doses of 5HT₂ receptor antagonist cyproheptadine or β -blockers, or antihistamines with anticholinergic properties (chlorpheniramine, diphenhydramine) or benzodiazepines;
- switching to another SSRI or non-tricyclic antidepressant;
- topical application of antiperspirant for localized cervicofacial sweating; and
- consultation with dermatologist if above strategies fail.

Answered by:
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7.

Why the rosacea flare-ups?

Is it common for rosacea patients to have flare-ups when they discontinue topical or oral medication?

Is this the same for isotretinoin, or is isotretinoin a cure?

Question submitted by
A. Malik, MD
Ottawa, Ontario

Yes, current rosacea treatments suppress the inflammation. The oral and topical antibiotics reduce erythema and inflammation during use. Rebounds are common when these medications are stopped. Long-term management including conservative measures, such as avoiding trigger factors, must be implemented. This is why dermatologists prefer to institute relatively benign measures such as topical antibiotics for long-term use.

When isotretinoin is used for nodulocystic acne, a high proportion of patients maintain a sustained benefit and, in some

cases, the treatment can therefore be regarded as a "cure". Furthermore, rebounds don't usually occur in this situation.

When used for rosacea, isotretinoin can be effective, but clearance is not usually sustained when the medication is stopped and rebounds can be seen if other maintenance measures are not in place.

Answered by:
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Why does evidence-based medicine change?

8.

Why do "evidence-based medicine" conclusions change from time to time regarding the same product?

Question submitted by
Terrence R. Carscadden, MD
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Evidence-based guidelines use the best available evidence at the time they were developed. Fortunately, research continues in an attempt to better understand every therapy we use.

Hormone replacement therapy (HRT) provides an excellent example of just such a change. Until July 2002, the best available evidence suggested benefit in reducing the risk of heart disease and preventing osteoporosis for all women using HRT. Then the first component of the Women's Health Initiative (WHI) trial found there was no benefit in preventing both of these problems.

One year later, evidence from the WHI trial, combined with the million women trial results, suggested breast cancer from use of HRT was a much more significant problem than demonstrated in previous studies.

These two studies completely changed the indications for HRT, therefore, all guidelines produced prior to these dates were outdated almost immediately.

One could argue that although such dramatic changes in "evidence" are frustrating, the fact that new evidence is so rapidly incorporated into guidelines is a strength of the evidence-based approach. One would hope as the quality of evidence improves, we will continually move closer to the optimum treatments for our patients.

Answered by:
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9.

Oral hypoglycemics for impaired glucose tolerance?

Is there any evidence to recommend oral hypoglycemics for patients with impaired glucose tolerance who are already on lifestyle modifications?

Question submitted by
Ghalib Ahmed, MD
Edmonton, Alberta

Yes, there is evidence for metformin and acarbose. Both have been shown, when administered to subjects with impaired glucose tolerance, to reduce the progression to diabetes by about 30% over two to three years. This can be compared to weight loss, which reduces the progression to diabetes by 50% to 60% over the same period.

Answered by:
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10

What triptans are out there?

Please comment on the different triptans available.

Question submitted by
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Triptans alleviate migraines in 60% of patients, and abort them in 30% of patients in the first two hours. About 25% experience recurrence within 24 hours, requiring retreatment.

Contraindications include:

- coronary disease,
- cerebrovascular disease,
- Raynauds,
- severe renal-hepatic disease,
- uncontrolled hypertension.

In very rare cases, myocardial infarction (MI) is reported. Side-effect of chest/throat discomfort for a short period is not cardiac in origin. Triptans can be used if on selective serotonin reuptake inhibitors (SSRIs), but not monoamine oxidase inhibitor (MAOI) drugs.

Five drugs, with an overall excellent safety profile, are available, including:

- Sumatriptan (14 years experience; tablet, spray, and injection form; caution for sulpha allergy)
- Naratriptan hydrochloride (fewer side-effects; slower response; less recurrence; caution for sulpha allergy)
- Zolmitriptan (similar to sumatriptan; rapid melt convenient but slower; rapid onset spray available soon; can be used with renal dysfunction)

- Rizatriptan (Meta-analysis suggests faster response; wafer is slower but convenient; caution if on large doses of propranolol)
- Almotriptan (newest triptan with few side-effects; relies on slower onset)

Some patients respond to one and not others, therefore, all should be tried before resorting to other treatments. These are the best drugs for migraines and can be coupled with analgesics and NSAIDS/COX 2 inhibitors for better response and reduced recurrence. Treat early for best response.

Spray or injection products produce the quickest response and are best if early vomiting occurs. [CME](#)

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