Vitamin supplementation

1. Many patients with hyperlipidemia ask about supplements to use in addition to diet, exercise and medication. I offer salmon oil capsules, 1000 mg, three times daily, folic acid, 1 mg, once daily, flaxseed capsules, 1000 mg, three times daily and unless contraindicated, ASA, 81 mg, once daily. What are your recommendations?

Question submitted by Dr. R.A. Oriando, West Vancouver, British Columbia

I am reluctant to prescribe supplements (in high doses) without proof of their efficacy. I think a case in point is the recent evidence with regards to 'meta-analysis' by Miller.[1]

For some patients, supplements might also provide a false sense of security and become an excuse to not meaningfully alter their diet.

The only supplement I might advocate is a multivitamin capsule.

Depending on the risk profile, I would also prescribe acetylsalicylic acid (ASA), but this is still a matter of much debate.[2]

1. Miller ER 3rd, Pastor-Barriuso R, Dalal D, et al: Meta-analysis: High dosage vitamin E supplementation may increase all-cause mortality. Ann Intern Med 2005; 142(1): 37-46.
2. Elwood P, Morgan G, Brown G, et al: Aspirin for everyone older than 50? BMJ 2005; 330(7505): 1440-1.

Answered by:

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For some, supplements provide a false sense of security and become an excuse to not meaningfully alter their diet.

Insomnia and CV problems

2. What is the influence of insomnia on cardiovascular problems?

Question submitted by Dr. Jean Drouin, Cap-Rouge, Québec

Simple insomnia will result in increased early morning-surges in BP, predisposing patients to acute cardiac events, which are more frequent between 6:00 AM and mid-morning. Simple insomnia can be treated with nighttime sedation, but if obstructive sleep apnea, due to upper airway obstruction were present, this would worsen the condition and is thus contraindicated.

About 10% of patients with cardiac failure have sleep apnea, which predisposes them to nocturnal hypoxemia and, therefore, cardiac ischemic events. It also increases the incidence of atrial fibrillation.

The treatment of sleep apnea is ventilatory assistance devices (*i.e.,* a mask) and supplemental oxygen, thereby improving paroxysmal nocturnal dyspnea and hypoxemia.

Answered by:

John H. Burgess, CM, MD, MACP, FRCP
Emeritus Cardiologist,
McGill University Health Centre
Professor of Medicine,
McGill University,
Montreal, Quebec

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Caring for patients with pacemakers

3. How should nursing home patients with pacemakers, be followed by the attending family doctor?

Question submitted by Dr. Leonard Sadinsky, Toronto, Ontario

First, make sure you have the following information:

- the type of the device,
- the programmed "lower rate limit" (which is the minimum heart rate the pacemaker will allow) and
- the Pacemaker Clinic contact information (the patient should be followed regularly, usually every six to 12 months).

Check the pacemaker site. Look for:

- redness,
- edema, or
- skin irritation above the pacemaker.

These signs may indicate impending erosion or infection, which is potentially dangerous and the Pacemaker Clinic should be notified immediately.

As well, check for signs and symptoms of possible pacemaker malfunction:

- unexplained dizziness,
- fatigue,
- syncope, or
- low heart rate (should be verified by a cardiac auscultation or an ECG).

If the patient has a rate responsive pacemaker, note that the sensor may provide too fast or too slow a pacing rate for the patient. If necessary, this can be adjusted in the Pacemaker Clinic.

Generally, pacemaker malfunction or complication is rare and a pacemaker does not interfere with the patient's life or medications.

Answered by:

Arnold Pinter, MD
Assistant Professor,
University of Toronto
Staff Electrophysiologist,
St. Michael's Hospital,
Toronto, Ontario

The roles of ASA & dipyridamole

4. Is there a role for acetylsalicylic acid (ASA)/ extended-release dipyridamole in angina or ischemic heart disease management?

Question submitted by Dr. Hany Aeta, Cumberland, Ontario

The short answer to your question is **NO**.

ASA works as an anti-platelet agent by inhibiting thromboxane A2. It reduces the risk of a clot occurring on ulcerated plaque (the cause of acute coronary events) by 25%. It is as beneficial as any other class of drugs.

Dipyridamole also has anti-platelet activities. However, it is a potent dilator of the coronary resistance vessels. When given to a patient with coronary heart disease, it will dilate these vessels in non-ischemic areas and reduce the flow distal to a stenosis. It is often used during stress electrocardiography to provoke ischemia. When given to a patient with angina, it causes coronary steal syndrome and will likely worsen the symptoms.

Answered by:

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