CARDIOLOGY

John Ritter recently died from aortic dissection. Now, all my baby boomer patients are scared. How do I diagnose early, who should be screened, and how can this affliction be prevented/treated?

Question submitted by:
Paul Stephan, MD
Family practitioner
Scarborough, Ontario

Aortic dissections are usually silent until they present acutely. They may also be detected incidentally during other testing. The overall incidence is low, so routine screening is not recommended. At the time of presentation, patients with severe chest pain (with or without back pain), and no changes of ischemia on electrocardiogram should be worked up for an ascending aortic dissection (Type A). Type B aortic dissection can involve any area from the descending aortic arch downwards, and may manifest with local tearing pain, migrating pain, or even focal neurologic changes.

The typical patient is male, 60 to 80, with long-standing hypertension. Younger patients who are at high risk include first-degree relatives of a victim and cocaine users, as well as patients with Marfan's syndrome, Ehlers-Danlos syndrome, and bicuspid aortic valves.

Acute imaging is done with transesophageal echocardiogram, magnetic resonance imaging, or computed tomography scanning. Most Type A dissections should be treated surgically. Stable Type B dissections are best treated by slowing the heart and lowering the blood pressure, thus, beta blockers and nondihydropyridine calcium channel blockers (*e.g.*, diltiazem) are first-line therapy.

Answered by:
Steve Wong, MD, FRCPC
Program director,
Community and internal medicine & technologies
University of British Columbia CME
Vancouver, British Columbia

EMERGENCY MEDICINE

In his article "It doesn't hurt, but it does smell!" (October 2003), Dr. Campbell recommends that people with diabetes soak their feet daily. For those patients with open ulcers, is soaking still advisable?

Question submitted by:
Karl Smyth, MD, CCFP
General practitioner
Geraldton, Ontario

This is a controversial topic. Our local diabetologist said he tends to recommend warm soaks for diabetic foot ulcers, while our plastic surgeon expert said he tends not to, unless the wound is very shallow.

The best consensus document on this issue comes from the American Diabetes Association, which states: "Soaking an ulcerated foot in a whirlpool, or using other hydrotherapies, is not supported by the evidence, and could lead to maceration, infection, or burns."[1]

I think the most important issue with these ulcers (after prevention) is early diagnosis and multidisciplinary referral.

The absence of a multidisciplinary foot-care team in diabetes patients with foot lesions has been associated with an increased incidence of amputation.

The following Web sites may help:

- *www.aafp.org/afp/20021101/1655.html*
- *http://care.diabetesjournals.org/cgi/reprint/22/8/1354.pdf*
- *www.edu.rcsed.ac.uk/Lectures/Lt9.htm*

Reference
1. Consensus Development Conference on Diabetic Foot Wound Care: April 7-8, 1999, Boston, Massachusetts.

Answered by:
Sam G. Campbell, MB BCh, CCFP(EM)
Assistant professor of emergency medicine
Dalhousie University
Halifax, Nova Scotia

OCCUPATIONAL MEDICINE

Do patients with chronic fatigue syndrome have elevated chromium levels? What conditions might elevate chromium levels, and how can chromium be eliminated?

Question submitted by:
Barbara Powell, MD, CCFP
Family practitioner
Kanata, Ontario

There is no need to routinely screen for chromium in patients with chronic fatigue. The metal that might be associated with fatigue is lead. However, obtaining an occupational and environmental history would preclude the need for blood lead measurement in most adults.

Significant occupational exposure to chromium may occur in various settings, such as stainless steel production or chromite ore processing. Additional potential sources of chromium include tobacco, and foods, such as egg yolks, whole grains, meats, cheeses, and wine. However, these sources should not result in very high chromium levels. If the blood chromium levels are truly elevated, I would not recommend any intervention aside from periodic followup.

Chromium can be measured in blood or urine, but is removed from the blood within 24 to 48 hours. Therefore, measurements relate only to recent exposures.

There is a form of chromium, trivalent chromium, which is actually an essential dietary component; an intake of 50 µg to 200 µg daily is recommended for adults. Dx

Answered by:
Dr. Ron House, MD, FRCPC
Assistant professor, occupational medicine
University of Toronto
Toronto, Ontario