

# Acute myocardial infarction

(MARCH 2009)

**TO THE EDITOR:** I truly enjoyed the review by Drs. Senter and Francis in the March issue of the *Journal*,<sup>1</sup> and I marveled at the authors' feat of encompassing so much essential information about the diagnose of acute myocardial infarction (MI) in so few pages!

Under the subheading "Electrocardiography: Necessary but not sufficient," the authors clearly describe the vagaries in using standard 12-lead electrocardiography in the diagnosis of acute MI. Indeed, one is often unable to substantiate the diagnosis of acute MI using standard 12-lead electrocardiography, with occasionally devastating consequences (death, loss of cardiac muscle due to failure to implement thrombolysis or percutaneous coronary intervention). Troponin biomarkers, echocardiography, and frequent sequential recordings of standard 12-lead electrocardiography may provide additional aid, as the authors remark. However, quite frequently, even all the above do not suffice, and acute MI remains undiagnosed, or, if the correct diagnosis is made, we fail to subject some patients to the appropriate procedures for optimal management of their condition.

It is time to upgrade standard 12-lead electrocardiography! Many have proposed certain additional electrocardiographic leads, on extensive thoracic electrode arrays, which are cumbersome to use in an acute or emergency setting. Instead, I have recently proposed as the solution the "double electrocardiogram" for the diagnosis of acute MI in patients with suspected acute coronary syndromes and a nondiagnostic electrocardiographic result. The double electrocardiogram consists of supplementing the 12-lead electrocardiogram immediately by repeating it, with the V<sub>1</sub> to V<sub>6</sub> electrodes used to record leads V<sub>3</sub>R, V<sub>4</sub>R, V<sub>7</sub>, V<sub>8</sub>, and V<sub>9</sub> to the left of the spine, and V<sub>9</sub>R to the right of the spine.

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## REFERENCES

1. Senter S, Francis GS. A new, precise definition of acute myocardial infarction. *Cleve Clin J Med* 2009; 76:159–166.
2. Madias JE. On the use of the inverse electrocardiogram leads. *Am J Cardiol* 2009; 103:221–226.

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**IN REPLY:** We thank Dr. Madias for his letter. We agree that doing a second electrocardiogram to inspect V<sub>3</sub>R, V<sub>4</sub>R, and V<sub>7</sub> to the left of the spine and V<sub>9</sub> to the right of the spine may provide important additional information that supports the diagnosis of acute MI. When clinical suspicion is high and the standard 12-lead electrocardiogram shows only minimal changes, then additional lead placement may be useful. Some other situations were not covered in our paper but are worthy of consideration when looking for electrocardiographic evidence of acute MI, eg:

- Patients with left main disease may demonstrate modest ST-T elevation in lead AVR with diffuse ST-T depression when having an acute MI.
- Patients with only T-wave-flattening in AVL may be having an acute MI due to isolated circumflex coronary disease.

Again, we thank Dr. Madias for his interest in our paper. We welcome his suggestion and hope that our response will be of some value to physicians responsible for making the very important decision to send a patient urgently to the cardiac catheterization laboratory.

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# Shingles vaccine

(JANUARY 2009)

**TO THE EDITOR:** Kudos to Drs. Sigh and Englund for their excellent article concerning the shingles vaccine in the January 2009 issue. However, I would like to know the authors' thoughts about the purpose and cost-effectiveness of vaccinating patients who definite-

ly have had shingles. I have heard that the recurrence rate is 3% to 5%, and the efficacy of the vaccine is only 50% to 65%. Though every article I have read states we *can* give the vaccine to these patients, *should* we?

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**IN REPLY:** We thank Dr. Shaheen for his interesting comment. He has made an important point. The data on the use of shingles vaccine in patients with a history of zoster are insufficient. The main study of shingles vaccine<sup>1</sup> excluded patients who had already had shingles.

The US Centers for Disease Control and Prevention says: "Persons with a reported history of zoster *can* [emphasis added] be vaccinated. Repeated zoster has been confirmed in immunocompetent persons soon after a previous episode. Although the precise risk for and severity of zoster as a function of time following an earlier episode are unknown, some studies suggest it may be comparable to

the risk in persons without a history of zoster. Furthermore, no laboratory evaluations exist to test for the previous occurrence of zoster, and any reported diagnosis or history might be erroneous."<sup>2</sup>

Until more data are available for this patient population, current evidence and availability of shingles vaccine should be discussed with patients who report a history of shingles.

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1. Oxman MN, Levin MJ, Johnson GR, et al. A vaccine to prevent herpes zoster and postherpetic neuralgia in older adults. *N Engl J Med* 2005; 352:2271–2284.
2. Harpaz R, Ortega-Sanchez IR, Seward JF; Advisory Committee on Immunization Practices (ACIP) Centers for Disease Control and Prevention (CDC). Prevention of herpes zoster. Recommendations of the Advisory Committee Immunization Practices (ACIP). *MMWR Recomm Rep* 2008 Jun 6; 57(RR-5):1–30.

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## CORRECTION

### Pregabalin for fibromyalgia

(APRIL 2009)

In an article that appeared in the April issue of the *Cleveland Clinic Journal of Medicine* (Kim L, Lipton S, Deodhar A. Pregabalin for fibromyalgia: some relief but no cure. *Cleve Clin J Med* 2009; 76:255–261.), journal editors failed to list the participation of one of the authors

in a clinical trial of pregabalin (Lyrica) that was funded by the drug's manufacturer. Dr. Atul Deodhar had disclosed his participation in the trial to an editor, and the failure to list it with the article at the time of publication was an oversight on the part of CCJM.