# Cardiovascular Diseases and Other Evidence for Primary Care Clinical Practice

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This issue includes several articles about various cardiovascular illnesses.<sup>1-4</sup> and another on a disease with increased risk for heart disease: hereditary hemochromatosis.<sup>5</sup> Yet another explores some myth busting about mortality and diabetes.<sup>6</sup> Two articles provide data with the support of patient and/or family organizations (Parent Heart Watch<sup>1</sup> and the Iron Disorders Institute<sup>5</sup>). Another 2 articles address maternal–child health, one considers treatment of hyperbilirubinemia,<sup>7</sup> and one describes an innovative team structure for pre-, post-, and intrapartum care.<sup>8</sup> We also provide preliminary data on azithromycin for chronic obstructive pulmonary disease. Pop quiz: What is the common contaminant with cocaine that causes serious side effects? What are these side effects? And another: What nonliver disease should be considered for children with elevated transaminase levels? (See the brief reports for answers.) Two reviews provide up-to-the minute practical facts for vaccinations and treatment-resistant hypertension that can be immediately incorporated into clinical practice. We also have an update on physician perspectives after 2 years of electronic medical record use and another with insights about the satisfaction of family physicians who are working in health centers in the first few years out of their residency. (J Am Board Fam Med 2012;25:403–405.)

# Cardiovascular Disease and Associated Entities

In cardiovascular disease, good history-taking remains important as confirmed by both Drezner<sup>1</sup> and McKee.<sup>2</sup> First, some of the classic symptoms of potential cardiovascular disease and collapse in children and young adults (average age 16 years) are indeed what parents retrospectively report occurred for their children before a sudden cardiac arrest.<sup>1</sup> Few survived these sudden cardiac arrests. One fourth also had a history of sudden early death in a family member. Some family members received the same diagnosis as the child after the child's diagnosis led to a medical work-up. Admittedly, many healthy children report one or another of these potentially worrisome symptoms, leading to difficulties in identifying the important ones to work-up. Thus, our authors suggest 3 particularly important history items: unexplained syncope (particularly during exercise), unexplained seizures, or

family history of sudden cardiac death before age 50 years. The authors report additional information to help ascertain the causes of these worrisome symptoms. Second, McKee<sup>2</sup> notes that lower education levels are associated with undiagnosed angina, which could be related to patient symptom recognition, or understanding of its significance, or the interaction with doctors and the healthcare system. Extra care in taking histories from patients with lower education may be needed.

In a fascinating discussion of the cultural differences in a World Perspective, O'Brien Cherry<sup>3</sup> surveyed French primary care physicians about the lower rates of cardiovascular disease in France compared with the United States. The physicians strongly approved of the equity their system provides patients, which they believed was a major reason for their good cardiovascular outcomes. Hypertension, diabetes, and smoking rates are similar to the United States, whereas the French have better lifestyle habits such as more exercise, eating more vegetables and fruits, plus smaller food portion sizes. The French physicians believed their system permitted them to use the doctor-patient relationship, including spending time with patients,

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to improve lifestyle cardiovascular risk factors and, thus, outcomes.

The interaction between obesity and diabetes and death is not straightforward and appears to be changing over time in the United States. Nonobese adults with diabetes have a greater mortality rate than obese patients with diabetes.<sup>6</sup> Obesity is less a factor for early death in patients with diabetes than in the past and is most significant for patients with severe (morbid) obesity along with hypertension. Patients with mild obesity and diabetes do not appear to have an elevated death rate. Based on these data, targeting resources to the severely obese with diabetes and hypertension seems like a reasonable strategy.

Viera's<sup>9</sup> review of resistant hypertension offers many useful insights and potential solutions. Obviously not all anomalous coronary arteries lead to an early demise. Wilkins <sup>4</sup> reports an anomalous coronary artery found in an elderly man during a work-up for syncope. The authors review the anatomy and which type of these anomalies are most likely to create a problem.

With hereditary hemochromatosis, patients reported fatigue and joint pain as the symptoms most associated with the disease.5 Hereditary hemochromatosis is associated with progressive liver failure, diabetes, dilated cardiomyopathy, hepatocellular carcinoma, hypogonadism, and hypothyroidism as well as other problems related to iron overload. A relatively new genetic test for hereditary hemochromatosis is often used to confirm the diagnosis. Most of the patients in this study had been tested for the gene, and some were identified based on the genetic test and family history rather than symptoms. Almost all were treated, and many felt the treatment helped their symptoms. This is an important reminder of a not common, yet not rare, treatable condition with nonspecific symptoms, in which the diagnosis can be made using genetic testing after specific blood work abnormalities.

## **Clinical Medicine**

Madlon-Kay<sup>7</sup> reports that neonatal phototherapy was rarely missed when indicated, but most infants receiving phototherapy were in the optional (subthreshold) range per the American Academy of Pediatrics guidelines.<sup>10</sup> Given this would seem to be a potential waste of resources, the next research question is: What are the factors that encourage providers to order this treatment? Hypotheses include a belief in an inevitable need for phototherapy, or fear of bad outcomes, or malpractice? Other monetary factors? Habit from residency? Pressure from hospital staff?

Much of the cocaine in the United States is apparently purposefully adulterated with levamisole, an animal antihelminthic, and potentially addictive in and of itself. This is an increasingly recognized problem as indicated by 2 separate author groups providing case reports related to levamisole-contaminated cocaine. Caldwell et al<sup>11</sup> describes agranulocytosis in one patient, whereas Morris et al<sup>12</sup> present an additional 2 cases of leukopenia, all potentially reversible even when dramatic.

Yee et al<sup>13</sup> provide compelling evidence that we should consider muscular dystrophy in children with elevated transaminases, probably not physicians' usual first thought. Elevated transaminases can be from muscle, not just the liver.

Hahn et al<sup>14</sup> had difficulty getting patients with chronic obstructive pulmonary disease to agree to a randomized trial of azithromycin for chronic obstructive pulmonary disease; many just wanted the medication. It took many investigators in multiple practice-based research networks to recruit patients, yet they still were not able to include as many participants as desirable. So, with our agreement, the authors present both the randomized portion and those who took the medication without randomization. Note that the patients who refused randomization were more ill, a reminder of how strongly patients needing relief can feel about trying different regimens, including a readily available antibiotic of unproven efficacy in this circumstance. We hope the investigators are able to complete the larger trial to make the outcomes more recognized.

Wolfe<sup>15</sup> also provides a stellar, easy-to-use review of adult immunizations, providing the rationales and details not readily available in the brief overviews provided in other locations. Thanks to de Schweinitz<sup>16</sup> for writing a touching and mesmerizing reflection on healing in family medicine.

## Health Services Research

Pecci et al<sup>8</sup> present their experience at changing the model at Boston University Hospital to more clearly and successfully integrate care across the family physician, midwife, obstetrician, and neonatology providers. Many family physicians who deliver babies have heard of this model and want to understand it better. This article provides much of

the background and details for this innovative cross-disciplinary collaboration.

Schumacher et al<sup>17</sup> found that adult patients with a history of cancer did not receive increased cancer screening, although there were (appropriately) more tests to check for recurrence of the original cancer. The study database was not designed to check for screening for colon cancer, so this is not included in this article. Because breast, colon, and cervical cancer are the only 3 cancers that the US Preventive Services Task Force<sup>18</sup> recommends for screening, this is a significant limitation. It is unclear what a lack of increase in prostate cancer screening means given the wide disagreement on prostate cancer screening and treatment.

Many family physicians transitioning to electronic medical records will be familiar with issues such as technological barriers and those many challenges of adjusting and creating uniformity in use of the electronic medical record. Now that we are gaining experience beyond the initial adjustments, Terry et al<sup>19</sup> provide physicians' perspectives 2 years after electronic medical record implementation. Cole et al<sup>20</sup> also raises questions about the sources of satisfaction or dissatisfaction of recently minted family physicians who choose to work in community health centers.<sup>20</sup>

Next issue: Tune in for our 7th annual practicebased research theme issue featuring original research and special communications from and about practice-based research networks.

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