

physicians after their discharge from the hospital. Overall, this study shows the false economy of underpaying primary care physicians.

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THE AUTHORS REPLY: Rackow is correct that data from the Medicare demonstration projects do not show that integrated geriatric care is ineffective; our aim was to point out that “case management” as commonly practiced and as made available through the demonstration projects does not seem to be protective. In addition, most of the integrated-management efforts have been evaluated in relatively small trials and have not been taken to a large scale. For this reason, we share the enthusiasm expressed by Straube et al. for the potential of the pilot programs of the Quality Improvement Organizations’ Care Transitions Program, and we are pleased that they will be expanded to all states in 2011. We are also encouraged by the Institute for Healthcare Improvement–Commonwealth Fund project STAAR (State Action on Avoidable Rehospitalizations)¹ in Massachusetts, Michigan, and Washington; the Society of Hospital Medicine–John A. Hartford Foundation’s Project BOOST (Better Outcomes for Older Adults through Safe Transitions),² which is being implemented in 30 hospitals in 24 states; the use of transition coaches to empower patients³; and the independent efforts of Kaiser Permanente, Geisinger, the Pittsburgh Regional Health Initiative, and others to improve transitions. These and other projects offer the opportunity for a highly productive community of effort and learning.

As Rohr suggests, we would have liked to examine the relationship between rehospitalization rates and the setting to which the patient was discharged, but as we noted, the coding of the

discharge destination in the Medicare hospital billing data appears to be unreliable. We share his view that the availability of primary care services is a key to successful transitions, but we doubt that changes in payment policy will be sufficient to produce a major improvement. Some people feel that payment changes are a magic bullet that will solve the problem. We believe that the rapidity and magnitude of change will also depend on strong leadership, standardization of practices, transparent measurement of performance, technical assistance for providers, involvement of families as well as patients, coordinated community efforts, and modifications to the regulatory environment. Unsuccessful transitions result, in part, from a severely fragmented health care system, and major improvement demands community teamwork among those who discharge patients, those who receive them, and patients and their families. A safe transition from the hospital to the community or a nursing home requires care that centers on the patient—who moves across organizational boundaries—rather than on care that is structured by the walls surrounding each provider.

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Case 11-2009: A Man with Fever, Headache, Rash, and Vomiting

TO THE EDITOR: In the Case Record of a man with fever and rash (April 9 issue),¹ acute infection with the human immunodeficiency virus (HIV) was the definitive diagnosis. The rash in acute HIV infection is commonly described as maculopapular or morbilliform.² The authors note

that the rash in this patient was nonvesicular, which is why they excluded infection with varicella-zoster virus (VZV). On the other hand, acute HIV infection cannot be ruled out in the presence of a vesicular rash. We evaluated a 28-year-old man presenting with fever and a diffuse vesicular



Figure 1. Diffuse Vesicular Rash.

The rash in a patient with acute human immunodeficiency virus (HIV) infection shows enlargement of vesicular elements (inset, white arrows).

eruption associated with some pustular and crusted lesions (Fig. 1). The clinical diagnosis of varicella was made, but serologic analysis did not confirm primary VZV infection, and the rash resolved without antiviral therapy. Acute HIV infection was suspected and diagnosed on the basis of quantitative HIV RNA analysis (5 million copies per milliliter) with negative anti-HIV serologic tests.

Acute HIV infection can have protean clinical presentations, and a high rate of misdiagnosis is reported.³ This syndrome should be included in the differential diagnosis of a varicella-like rash.

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TO THE EDITOR: In the Case Record of a patient with acute HIV infection, the decision to initiate antiretroviral therapy was inappropriate. His physician should have ordered and awaited the results of an assay for drug resistance before selecting

components of a medication regimen. Although this monogamous patient was most likely infected by a partner who had not received previous treatment, that partner (who had reportedly been HIV-positive for 4 years) might have been infected with a drug-resistant strain. Mutations conferring drug resistance have been found to persist for many years, despite the absence of selective pressure.¹ Two of the three medications in this patient's regimen, efavirenz and emtricitabine, have low genetic barriers to resistance. If even one mutation were present, the viral population would rapidly acquire resistance to the entire treatment combination. Given that chronic HIV infection is so manageable, clinicians should avoid a rush to treat acute primary infection. Treatment guidelines strongly recommend obtaining baseline drug-resistance testing.²

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THE DISCUSSANT AND A COLLEAGUE REPLY: Acute HIV infection can manifest with many presenting symptoms. The most common rash is a maculopapular eruption,¹ as described in our case. However, other presentations are possible, particularly if the patient has a coexisting secondary infection, such as syphilis or VZV infection. Reactivation of a latent, chronic viral infection would not be surprising, given the transient immunosuppression associated with a decline in the number of CD4+ T cells that is typical of acute HIV infection. In the interesting case described by Del Borgo et al., it remains uncertain whether the patient had acute HIV alone or a concurrent VZV eruption, which the skin findings suggest. The greatest diagnostic yield would have been derived from viral culture or direct fluorescent antibody from an active skin lesion, regardless of the results of VZV serologic analysis. The lesions might have healed without specific antiviral therapy in either case.

Leiner questions whether we should have

waited until the results of drug-resistance testing were available before initiating antiretroviral therapy. We ordered drug-resistance testing for our patient, as recommended by the treatment guidelines.² However, we decided to initiate therapy while awaiting the results for the following reasons. First, we knew that his likely source partner had drug-sensitive virus, which informed our decision to choose an efavirenz-based regimen. Had we not known the drug sensitivity of the source partner, we would have considered a protease inhibitor–based regimen (which has a higher genetic barrier to resistance) while awaiting genotypic results, as recommended by treatment guidelines. Second, we typically receive genotypic results within 2 to 3 weeks. Therapy in this patient was started with the expectation that we would have this information back shortly, allowing us to adjust the regimen rapidly if needed. Third, the patient had severe and ongoing signs and symptoms of meningitis, which we felt that early therapy would ameliorate. Some guidelines suggest routine consideration of acute

HIV treatment in patients with neurologic involvement.³ Finally, a delay in the initiation of therapy might have resulted in the impairment of important CD4+ T cells, which are rapidly depleted within a few weeks after infection.^{4,5}

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What Went In When Trans Went Out?

TO THE EDITOR: Industrially produced trans fatty acids in popular foods such as fast foods, cookies, cakes, and snacks¹ are gradually being replaced in the United States and Western Europe by other fatty acids because of societal pressure and legislative regulations.² This movement is driven by increasing scientific evidence of the harmful effects of industrially produced trans fatty acids on health, especially the increased risk of coronary heart disease,³ and by the lack of evidence of any beneficial health effects. The consumption of trans fatty acids is associated gram for gram with a greater risk of coronary heart disease than is the consumption of saturated fatty acids. The risk of trans fatty acids is even more pronounced as compared with that of monounsaturated fatty acids and especially polyunsaturated fatty acids.⁴ Despite the obvious theoretical health benefits of replacing trans fatty acids with other fatty acids in food products, concern has been expressed that this change might increase the intake of saturated fatty acids.⁵ In light of

this concern, we have investigated various popular foods that contain high concentrations of trans fatty acids. We have examined which types of fatty acids are present in these foods as compared with similar foods that contain low concentrations of trans fatty acids.

Nineteen food items containing a high amount of trans fatty acids and 19 similar food items containing a low amount of trans fatty acids were purchased from large supermarkets and fast-food outlets in 14 countries from 2005 through 2008. The fatty acid profiles were analyzed, and similar types of foods bought in the same country were compared.

Figure 1 (facing page). Trans Fatty Acids and Saturated, Monounsaturated, and Polyunsaturated Fatty Acids as Percentages of Total Fatty Acids.

The average increase or decrease in percentage points is shown for foods with a low amount of trans fatty acids as compared with similar foods with a high trans fatty acid content, according to country.