method: culture, 10 infections; and an alternate PCR method that used a different DNA sequence, 12. Other studies have confirmed that the specificity of PCR analysis of cervical samples is 99.7%–100%, and similar specificities can be expected for urine samples [2–5]. Therefore, for every 1000 women tested, one might expect that the results of 0–3 tests, at most, are falsely positive.

We agree that DNA amplification tests are not perfect and that there is always the potential for tests with false-positive results. Furthermore, screening for any condition when the prevalence is low is a reasonable matter for public health debate. The advantage of screening for Chlamydia trachomatis infection, even in a population among whom the prevalence is low, is that the tests are simple and relatively inexpensive compared with the potential health care costs of untreated sequelae, the infection is easy to cure, and screening and treatment prevent pelvic inflammatory disease [6]. Given our current difficulty in determining which women are at highest risk of chlamydial infection, we continue to advocate screening of all sexually active women aged <25 years for the infection.

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Factors Associated with Incomplete Virological Response to Highly Active Antiretroviral Therapy

SIR—We read with interest the article by Clough et al. [1] concerning factors that predict incomplete virological response to protease inhibitor–based antiretroviral therapy. This retrospective study included 104 HIV-positive adults, most of whom had previously received antiretrovirals. Logistic regression analysis of predictors of incomplete response to protease inhibitor–based antiretroviral therapy (defined as a viral load >400 copies/mL after 20 weeks of therapy) included low baseline weight, baseline plasma HIV type 1 RNA level, prophylaxis for Pneumocystis carinii pneumonia, and active drug abuse. Regular prescription of narcotics or benzodiazepine anxiolytics and use of any Internet site predicted a more favorable response.

The need for more information on factors associated with incomplete virological response to protease inhibitor–based antiretroviral therapy prompts us to report on a study we conducted at the Medical Center of Louisiana HIV Outpatient Clinic in New Orleans. The objective of our retrospective study was to determine whether mental illness (depression, anxiety, or psychosis) or substance abuse was associated with incomplete virological response (defined as a viral load >400 copies/mL during the 6-month study period). Our study included 1245 HIV-positive adults who attended the clinic during the first 6 months of 1999 and were enrolled in the Centers for Disease Control and Prevention Adult Spectrum of Disease database. All 1245 patients were receiving highly active antiretroviral therapy (HAART) (i.e., triple combination therapy that includes a protease inhibitor).

Of the 1245 patients, 75.3% were male, 56.9% were black, and 54.2% were aged <35 years. Approximately one-third (34.1%) of the patients had a CD4 lymphocyte count <200/mL, and 38.7% had an AIDS-defining opportunistic infection. Most patients (82.7%) had a detectable viral load (>400 copies/mL).

Mental illness and substance abuse were prevalent. More than one-third (35.7%) of the patients had been clinically diagnosed with depression; 5.4%, with anxiety; and 4.3%, with psychosis. Twenty-one percent and 13% had been diagnosed with drug abuse and alcohol abuse, respectively.

Logistic regression analysis showed that past or active alcohol abuse (OR, 1.78; 95% CI, 1.05–3.03), female sex (OR, 1.55; 95% CI, 1.07–2.25), and a CD4 lymphocyte count <200/mL (OR, 2.97; 95% CI, 2.05–4.31) were significantly associated with incomplete response to HAART therapy (viral load >400 copies/mL). The following variables were not significantly associated with incomplete response to HAART therapy: depression, anxiety, psychosis, drug abuse, age, and race.

Our study showed that mental illness and substance abuse, except for active or past alcohol abuse, were not associated with incomplete virological response. Alcohol abuse has been shown to be associated with progression of HIV infection and...
incomplete virological response [2]. Reduced efficacy of antiretrovirals because of pharmacological interactions with alcohol and alcohol abuse leading to nonadherence to HAART therapy may help explain poor virological responses in alcohol abusers [3].

An unexpected study finding, however, was that women were significantly more likely than men to have incomplete virological responses. (The study by Clough et al. included few women [3%].) This finding was consistent with another analysis we conducted that showed that women were significantly more likely than men to be prescribed a change in the HAART regimen during the 6-month study period (OR, 1.45; 95% CI, 1.05–1.99), an indication that the previous HAART regimen was ineffective.

This finding indicates that there may be sex-specific differences in viral load and virological responses [4]. More studies investigating HIV-positive women receiving HAART therapy are recommended, since their treatment success may involve an even more complex range of psychosocial and clinical issues than that for men [5]. Our study, for instance, showed that women were significantly more likely than men to have depression, a condition that could lead to poorer adherence and incomplete virological response.

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Rash and Opportunistic Pneumonia in a Malnourished Infant Adopted from China

SIR—Boyce and Wright [1] described 2 infant girls adopted from China who had cytomegalovirus (CMV) pneumonia and possible immune deficiency due to malnutrition. In August 1995, we saw a similar case in an adopted Chinese girl who had a malnutrition-associated rash and opportunistic pneumonia due to *Bordetella bronchiseptica* and, possibly, CMV.

An infant girl was abandoned in a rice field in China and placed in an orphanage until the time of adoption at age 5 months. She developed an upper respiratory tract infection during the week before her departure to the United States and, en route, developed progressive respiratory distress. One week later, she was admitted to a local hospital with tachypnea (respiratory rate, 60 breaths/min), O2 saturation (determined while she was breathing room air) of 74%, and a left upper lobe infiltrate that was evident on a chest radiogram. Cultures of upper respiratory tract secretions for *Bordetella pertussis*, *Chlamydia* species, adenovirus, and respiratory syncytial virus were negative, as were a Mantoux test, culture of a gastric aspirate, staining for acid-fast bacilli, and methenamine silver staining of a tracheal aspirate for *Pneumocystis carinii*. Fluorescent antibody tests were negative for influenza A and B viruses and parainfluenza virus types 1, 2, and 3. HIV serology was nonreactive. Four days later, the patient required tracheal intubation and mechanical ventilation and was transferred to our pediatric intensive care unit.

At the time of admission, she was noted to be below the fifth percentile for age in height (52 cm), weight (3280 g), and head circumference (35 cm). Fine desquamating dermatitis and pitting edema were present bilaterally on the lower legs. Abnormal laboratory findings consistent with malnutrition included low serum levels of vitamin A (6.6 μg/dL; normal value, 30–80 μg/dL), vitamin E (4.9 mg/dL; normal value, 5–20 mg/dL), prealbumin (10 mg/dL; normal value, 13–27 mg/dL), and albumin (2.1 mg/dL; normal value, 3.9–5.1 mg/dL). A chest radiogram showed diffuse interstitial infiltrates. Culture of a tracheal aspirate revealed abundant oxidase-positive, nonfermentative, gram-negative coccobacilli that were identified by biocode 1200067 of the API System (Analytab Products, Plainview, NY) as *B. bronchiseptica*. Culture of urine obtained before transfer was positive for CMV, and monoclonal antibody staining of shell vial cultures of our tracheal and nasopharyngeal specimens was positive for CMV; however, a test for CMV antigenemia was negative.

The patient was treated empirically with total parenteral nutrition, broad-spectrum antimicrobials (trimethoprim-sulfamethoxazole [TMZ-SMZ], cefotaxime, erythromycin, and acyclovir), and iv immunoglobulin. Acyclovir treatment was discontinued, and therapy with ganciclovir (10 mg/kg/d for 3