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Reply to Ijaz et al.

To the Editor—The hepatotoxicity of the 2-month pyrazinamide and rifampin (PZA-RIF) regimen for the treatment of latent tuberculosis infection (LTBI) is well described [1, 2]. Our article [3] confirmed that the toxicity of the PZA-RIF regimen was greater than the isoniazid (INH) regimen. However, before we throw the baby out with the bathwater, we should reexamine the purpose of treatment of LTBI and look with an unjaundiced eye at the efficacy of the “gold standard” of the 9-month regimen of INH.

Numerous studies have determined that certain high-risk populations are at increased risk for reactivation of dormant tuberculosis [4]. The efficacy of a 9-month regimen of INH in preventing reactivation of LTBI is well known. What is also known is that only 30%–60% of persons who begin treatment with INH actually complete therapy [4–6]. A recent study from Johns Hopkins [7] revealed that only 52.6% of 770 patients who were treated with INH took at least 80% of their medications over the 9-month period. Treatment with INH, although less toxic than PZA-RIF, still carries a significant risk of serious adverse effects, particularly among the elderly population and in patients who are treated with immunosuppressive agents for rheumatoid arthritis [8, 9]. Severe hepatotoxicity resulting in liver transplantation and death have been reported for many years in patients treated with INH for LTBI [10, 11]. There have been 3 INH-associated deaths in North Carolina in the past 4 years (unpublished data). Unlike it is for patients receiving PZA-RIF regimen, monitoring of liver functions is not routinely performed in patients who are treated with INH. This policy may lead to an underestimation of the actual incidence of hepatotoxicity in patients treated with INH.

In our cohort, none of the patients who developed hepatotoxicity because of PZA-RIF died. In fact, liver functions returned to normal in all patients when either PZA alone or both drugs were discontinued. We are increasingly using the 4-month regimen of rifampin to treat our patients with LTBI, because the hepatotoxicity is low and the completion rates are high for this regimen [7].

The authors from the Centers for Disease Control and Prevention would have us believe that treatment of LTBI is a choice between good (INH) and evil (PZA-RIF). Would that the argument were that simple. Our goal is for patients to complete therapy with whatever regimen is chosen. Given the greater likelihood of completing the short-course regimens (PZA-RIF for 2 months and RIF for 4 months) and the self-limited hepatotoxicity (in our hands) of the PZA-RIF regimen, we will continue to use both regimens in selected patients.

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References


Prevalence of Antibodies against Rubella Virus in Spain

To the Editor—Hyde et al. [1] report the results of a prevalence study of rubella immunity levels in the US population. In relation to their findings, we present our experience in a European country. The importance of the strategy of anticipating rubella revaccination, improved surveillance, and the implementation of specific vaccination programs against rubella addressing susceptible groups needs no emphasis [2, 3]. Recommendations by committees of experts and the prevailing childhood immunization schedules are unanimous in including the above-mentioned strategies [4]. In this context, ser-
The rate of seropositivity for rubella antibodies was 5.2% lower in the older age group than in the younger age group. An additional finding was that, in the 6–14-year-old age group, female subjects had a significantly higher percentage of seroprotection than male subjects; 534 (94.4%) of 568 female subjects had positive results, compared with 521 (87.1%) of 598 male subjects ($P < .001$).

Although we are conscious of the caution that should be exercised in this kind of study, we believe that, assuming internal validity for the evaluated population, our results indicate an age-dependent loss of seroprotection against rubella virus. Among the potential causes that support this conclusion are, on the one hand, differences in the level of vaccine coverage reached by the 2 groups of children [6] and, on the other hand, limitations inherent in the vaccine itself [7]. Moreover, it is true, of course, that in our country—as in all developed countries—systematic vaccination of girls before puberty is highly efficient in preventing congenital rubella syndrome [8]; all the same, it is certain that there are still small proportions of unprotected persons. The growing importance of immigration in developed countries is of particular interest because of the introduction of clusters of unvaccinated vaccinated individuals [9]. The efficiency of new strategies of anticipating combined vaccines needs to be evaluated, and seroepidemiological studies seem to be a good tool for such a purpose [10].

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References


Efficacy of Nitazoxanide for Cyclosporiasis in Patients with Sulfa Allergy

To the Editor—Cyclospora cayetanensis is a human parasite thought to largely af-