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DOI: 10.1056/NEJMc1408238

TO THE EDITOR: In her article on pediatric hypertension, Ingelfinger does not mention the role of uric acid and hyperuricemia. Randomized trials have shown the benefits of urate-lowering treatment in lowering blood pressure in adolescents with hyperuricemia and recently diagnosed essential hypertension[1] and in obese adolescents with prehypertension.[2] I believe that there is sufficient evidence to support the inclusion of uric acid measurement in the workup for evaluation of adolescents with suspected hypertension and for a trial of allopurinol in those with hyperuricemia.

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No potential conflict of interest relevant to this letter was reported.

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DOI: 10.1056/NEJMc1408238

THE AUTHOR REPLIES: Gupta and Gupta point out the importance of sleep-disordered breathing in the pathobiology of adolescent hypertension, though sleep patterns were among the factors mentioned in the article as part of the medical evaluation and nonpharmacologic therapy. In addition to their study,[1] work from the Tucson Children's Assessment of Sleep Apnea Study has indicated that decreased sleep time and elevated body-mass index are associated with increases in blood-pressure levels.[2] Best therapy for sleep-disordered breathing in children and adolescents is an evolving area, especially because adherence to CPAP regimens is difficult for children and adolescents, as discussed in a recent review by Tapia and Marcus.[3]

Uric acid, as Bellomo notes, has been evaluated as a biomarker for essential hypertension in children and adolescents. Much data, particularly from animal models, indicate that increases in uric acid lead first to reversible vasoconstrictive changes, mediated by stimulation of renin release and a decrease in the levels of circulating nitrates, and later to a second phase in which changes in the vasculature within the kidney result in sustained blood-pressure elevation and, ultimately, to salt-sensitive hypertension.[4] Currently, short-term data indicate that the use of allopurinol in children or adolescents with hypertension may be effective, but such studies are preliminary.[4] Further and longer-term trials would be needed before allopurinol or other therapy to lower uric acid levels in children with hypertension would be recommended.

Julie R. Ingelfinger, M.D.

Since publication of her article, the author reports no further potential conflict of interest.

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Pregnancy and Infection

TO THE EDITOR: Kourtis and colleagues (June 5 issue)[1] describe the effect of pregnancy on the susceptibility to and severity of infections, but they only briefly mention the human immunodeficiency virus (HIV). This is surprising, given that HIV causes up to 25% of deaths during pregnancy and the postpartum period in women in sub-Saharan Africa.[2] Rigorous studies on the interaction between pregnancy and HIV are scarce, but most of the available data suggest that preg-

nancy does not increase HIV acquisition[3] or the severity of HIV-related illness. In addition, HIV does not increase the risk of obstetrical complications, with the exception of sepsis.[4] Whether pregnancy accelerates HIV disease progression is uncertain. Pregnant women tend to have less advanced HIV disease than nonpregnant women, but few studies stratify patients according to the stage of HIV infection at the start of follow-up. A study involving HIV-infected women who were receiving antiretroviral therapy did not show that pregnancy was associated with an increased risk of death.[5] This finding implies that the HIV-attributable mortality among pregnant women is largely coincidental to pregnancy, and there is little reason to discourage healthy HIV-infected women who want to become pregnant from doing so.

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No potential conflict of interest relevant to this letter was reported.

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TO THE EDITOR: Kourtis et al. review specific infections in pregnancy and the available scant evidence of the increased severity of and susceptibility to infections among pregnant women. However, they omit infections caused by two important pathogens that adversely affect the health and treatment outcomes of mothers and children worldwide: *Mycobacterium tuberculosis* and cytomegalovirus (CMV).

Globally, tuberculosis causes an estimated half-million deaths per year in women, a large proportion of whom are of reproductive age. Although this condition remains underdiagnosed in pregnant women, the incidence of tuberculosis, tuberculosis-associated mortality, and the risk of hospitalization are high among pregnant women.[1] Clinical observations show that pregnancy may have an effect on the pathogenesis of tuberculosis and increases the maternal risk of *M. tuberculosis* infection or reactivation of latent tuberculosis.[2,3]

CMV infection is one of the most common viral infections in humans and can remain latent and reactivate under conditions of immunosuppression.[4] CMV infections can reactivate in pregnant women and be transmitted to the neonate in utero or through breast milk.

The complex relationships between pregnancy-induced immunologic changes and infection with intracellular pathogens remain to be defined through carefully designed case-controlled studies.

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TO THE EDITOR: The review article by Kourtis et al. focuses on the increased seriousness of a number of viral disorders, malaria, coccidioidomycosis, and a single bacterial disorder, listeriosis, during gestation. However, perhaps the most prevalent example of infection-related virulence in pregnancy is the response to severe urinary tract infection and urosepsis. An important part of prenatal care is screening to detect bacteriuria in early pregnancy, and the literature shows that asymptomatic bacteria left untreated can be followed by acute pyelonephritis in about a fourth

of women in whom bacteriuria is present.[1] Moreover, as compared with complications in nonpregnant women, this infection in pregnant women can be quite virulent and can be associated with both substantial decreases in the glomerular filtration rate and volume-independent permeability pulmonary edema, which is virtually absent in nonpregnant women.[2,3]

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No potential conflict of interest relevant to this letter was reported.

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THE AUTHORS REPLY: We agree with Calvert and Ronsmans that the evidence regarding increased susceptibility to HIV infection during pregnancy, although intriguing, remains inconclusive.[1] We also agree that data are lacking to indicate increased severity of HIV infection among pregnant women, and most of the existing data, although imperfect, do not suggest acceleration of HIV disease during pregnancy.[1]

Most of the literature on increased severity of tuberculosis during pregnancy dates from the pre-antibiotic era, and rigorously conducted studies regarding this question in the era of chemotherapy for tuberculosis are scarce. A recent large cohort study involving pregnant women in the United Kingdom showed no increase in the incidence of tuberculosis during pregnancy, but it did show an increased risk during the first 6 months post partum.[2] We agree with Zumla et al. that well-designed studies to address this question are needed.

Despite the well-recognized and potentially serious outcomes of CMV infection in neonates, data are lacking to support the increased risk of CMV acquisition or CMV severity among pregnant women. Finally, although potentially serious urinary tract infections and pyelonephritis are more common in pregnant women than in nonpregnant women, these risks are largely attributable to mechanical and physiological factors.

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Since publication of their article, the authors report no further potential conflict of interest.

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Medicare Readmission Penalties in Detroit

TO THE EDITOR: In 2013, more than 2200 U.S. hospitals forfeited a total of approximately $280 million in Medicare funds because their readmission rates for congestive heart failure, pneumonia, and acute myocardial infarction exceeded expected rates; these readmission penalties were stipulated by the Affordable Care Act.[1] We evaluated 2013 and 2014 readmission penalties levied against hospitals in Detroit, as compared with penalties assessed against hospitals in other large cities in the East North Central region of the United States (as defined by the U.S. Census), and we correlated this information with census-derived socioeconomic data.[2] We also compared readmission penalties for hospitals in the large cities with penalties for hospitals in the remainder of the respective state.

With regard to the largest metropolitan areas in each of the five states in the East North Central region, hospitals in Detroit had the highest mean readmission penalties in 2013 (0.93±0.13% of Medicare payments, $P<0.05$ for the comparisons with the other metropolitan areas) and in 2014 (0.86±0.19%, $P<0.05$ for the comparisons