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TH1/TH2 immune response

To the editor:

I was very interested in the findings of Renz et al in their article entitled "TH1/TH2 immune response profiles differ between atopic children in eastern and western Germany."¹ I have long wondered whether the growing incidence of asthma and atopy is not a result of the hygiene hypothesis, but instead caused by the large increase in the number of immunizations given at one time and the earlier timing of immunizations given to infants in developed nations in the last few decades. I think it very possible that the large number of immunizations given at one time at a very early age might push children from atopic families toward a TH2 response. The Renz study was conducted in 1995 and 1996, and therefore even the youngest children studied in eastern Germany would have been vaccinated according to the schedule followed by the communist regime. My question is whether that vaccination schedule, either in terms of timing, number of immunizations at one time, or types of immunizations, differed from that of western Germany.

If there were significant differences, then the physicians of Germany are uniquely positioned to study my hypothesis. Presumably, the immunization practices of physicians from eastern and western Germany have now been unified, if they diverged before. Another large study done on eastern and western German children 5 to 10 years after having similar immunization schedules in infancy would be very instructive.

In the late 1940s and early 1950s, there was a push among pediatricians to have infants introduced to solid food (especially egg) as early as 3 weeks of age. It is now known that fewer allergies result in children with atopic parents when introduction of the most common allergenic foods is delayed until the age of 3 years. Could not something similar be happening as the result of introducing too many immunizations at once at very early ages? It is certainly worth studying.

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