Cross-Sectional Seroepidemiology of *Bordetella pertussis*

To the Editor—In a recent cross-sectional study of *Bordetella pertussis* seroepidemiology, Cattaneo et al. [1] demonstrated two peaks in antibodies against pertussis toxin and filamentous hemagglutinin. One peak occurred at 4–6 years of age, the second at 13–17 years. The authors concluded that the first peak was due to immune response after whole cell diphtheria tetanus and pertussis (DTP) vaccine was administered at that age, while the second was due to pertussis infection in adolescence.

An alternate explanation cannot be excluded. The sera assayed in this study were obtained in 1985–1990, when no acellular pertussis vaccines were licensed in this country. A recent efficacy trial sponsored by the National Institute of Allergy and Infectious Diseases (NIH) [2] found surprisingly low efficacy for one US licensed whole cell DTP vaccine following three doses in infancy, and it has been reported [5].

Since the booster (fifth) dose of DTP is administered 33–54 months after the reenforcing (fourth) dose, and in light of the reemergence of pertussis [4], it is plausible that this peak represents a boost due to infection acquired before or despite the booster dose. If so, it would not be the first time this phenomenon has been reported [5].

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References


NOTICE

The Eastern Pennsylvania Branch of the American Society for Microbiology will present its annual symposium 14–15 November 1996. The topic is “Diagnosis of Infectious Diseases using Molecular Methods: Impact on the Laboratory and Patient Care.” The meeting will be held at the Adams Mark Hotel in Philadelphia. For information contact Anna Feldman-Rosen, 1166 Delene Rd., Rydal, PA 19046; telephone (215) 955-1695.