in the thymus and await experiments that specifically address this issue.

Linda F. Thompson

The Immunology and Cancer Program,
Oklahoma Medical Research Foundation,
425 Northeast 13th Street,
Oklahoma City, OK 73104, USA.

Regina Resta

The Albany Regional Cancer Center,
317 S. Manning Blvd., Albany,
NY 12208-1774, USA.

The article also suggests that depriving the immune system of Th1 activity as convalescent infants develop a Th1 response, a result confirmed in murine models of infection10,11. Whether the immune system has evolved to ‘anticipate’ appropriate inputs in an appropriate sequence after birth has not yet been resolved. Our opinion is that this would be an inflexible approach to immunity and that it is more likely that each pathogen (and the very large and diverse numbers of commensals that comprise the normal flora) is dealt with according to different criteria, such as physiological niche, toxin production and perhaps even danger.

Miriam T. Brady
Bernard P. Mahon
Kingston H.G. Mills

Infection and Immunity Group,
Dept of Biology, National University of Ireland,
Maynooth, Co. Kildare, Ireland.

References


Pertussis infection and vaccination induces Th1 cells

In the recent Viewpoint article, Rook and Stanford12 suggest that increased incidence of allergies can be explained by decreased exposure to T helper 1 (Th1)-inducing pathogens and increased exposure to Th2-inducing vaccines. Evidence for the former is growing, however the latter, for the most part, hinges on the assertion that current pertussis vaccines enhance Th2 responses by inducing vaccines. This is clearly the case. Indeed, a considerable body of evidence has demonstrated that whole-cell pertussis vaccines, similar to natural infection, are strong Th2 inducers. This is clearly not the case. Pertussis infection and immunity Group, Dept of Biology, National University of Ireland, Maynooth, Co. Kildare, Ireland.

References

3 Ryan, M., Murphy, G., Nilsson, L. et al. (1998) Immunology 93, 1–10