Respiratory syncytial virus infection in infants is associated with predominant Th-2-1ike response

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Viral infections have been associated with cellular immune responses and production of Th-1 cytokines. Respiratory syncytial virus (RSV), however, induces virus-specific IgE, which might be a consequence of a Th-2-like activation. To test this hypothesis we quantified interferon-? (IFN-?) and interleukin-4 (IL-4) in the supernatant of peripheral blood mononuclear cells cultured for 24 and 48 h in the presence or absence of phytohemaglutinin and pokeweed mitogen and the lymphocyte phenotypes to analyze subsets and their activation markers, from 15 hospitalized infants during an acute lower respiratory infection caused by RSV and 17 healthy control infants from 1 to 15 mo of age. Compared with the control infants, those infected with RSV had an increase in the number of B-cells ($p < 0.02$) and decreases in both CD8+ T- cells ($p < 0.01$) and activated CD8+/CD25+ suppressor/cytotoxic T-cells ($p < 0.007$). In RSV-infected infants, IFN-? production was subtotally suppressed, whereas IL-4 produc