Incidence of Viral Upper Respiratory Tract Infection (URI) and Acute Otitis Media (AOM) Complications in the First Six Months of Life.

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\textbf{Background:} Infants in the first 6 mos. of life have lower AOM incidence than children 6-24 mos. of age; however, early onset of AOM is predictive of recurrences. AOM often occurs as complication of URI. Incidence of URI in infants $\leq$ 6 mos. has not been well-studied as viral infections in this age group often manifest as lower respiratory diseases.

\textbf{Objectives:} To determine the incidence of URI and its AOM complication and to identify risk factors associated with URI and AOM occurrences.

\textbf{Methods:} In an ongoing prospective study of 300 infants, subjects were enrolled from near birth and followed to the 1st AOM episode or 6-12 mos. of age. Data were collected on family history, risk factors and TNF$\alpha$\textsuperscript{-308} and IL-6\textsuperscript{-174} polymorphisms. Families were contacted by visits or phone calls bi-weekly. Subjects were evaluated during URI and followed for AOM complication.

\textbf{Results:} To date, 88 children have been followed to 6 mos. of age; 59% were males, 77% whites and 62% Hispanics. Seven percent of the infants were breastfed to 6 mos., 6% attended daycare and 6% were exposed to smoke. A total of 162 URI and 38 AOM episodes were documented (mean =1.9 URI and 0.7 AOM episodes/infant/6 mos.). Incidence of URI ($\geq$1 episodes) was 79%; incidence of AOM was 32%; 30% of infants had 3-7 URI episodes, and 2% had 3 AOM episodes in 6 mos. Analyses did not show significant association between URI or AOM with genetic and other risk factors.

\textbf{Conclusions:} Infants in the first 6 mos. developed an average of 1.9 URI episodes, 23% of these were complicated by AOM. Incidence of AOM was 32%. Relatively low rate of AOM complicating URI may due partly to maternal antibodies and low colonization rate with AOM pathogens. Larger number of subjects is required to determine the factors influencing incidence of URI and AOM in this age group.