Treatment of respiratory syncytial virus infection with vitamin A: A randomized, placebo-controlled trial in Santiago, Chile

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Background. Treatment with high dose vitamin A reduces complications and duration of hospitalization for children with measles. In respiratory syncytial virus (RSV) infection, as with measles, low serum vitamin A concentrations correlate with increased severity of illness. Methods. To determine whether high dose vitamin A treatment is also effective for treating RSV disease, we conducted a randomized, double blind, placebo- controlled trial among 180 RSV-infected children between 1 month and 6 years of age at three hospitals in Santiago, Chile. Children with nasal washes positive for RSV antigen were given oral vitamin A (50 000 to 200 000 IU of retinyl palmitate, dosed according to age; n = 89) or placebo (n = 91) within 2 days of admission. Results. There was no significant benefit from vitamin A treatment for the overall group in duration of hospitalization, need for supplemental oxygen or time to resolve hypoxemia. For the subgroup of children with significant hypoxemia on admissio