Disease

Odhiambo, P

Abstract:

Occasional reports have suggested that infants with congenital heart disease may have an increased risk of severe illness from respiratory syncytial virus (RSV) infection. We prospectively studied 699 infants hospitalized during the winters of 1976 through 1980, when RSV was prevalent in the community; 229 of these infants had proved RSV infections acquired either before admission or during hospitalization; 27 had both congenital heart disease and RSV infection, and 46 had congenital heart disease without RSV infection. Infected infants with congenital heart disease had significantly more severe illness than those without congenital heart disease, as judged by the requirement for intensive care and assisted ventilation and by the mortality rate (37 per cent vs. 1.5 per cent, P less than 0.01). The infection was acquired nosocomially by 21 per cent of infected infants; the mortality rate from nosocomial infection was also higher in infants with congenital heart disease (44 per cent vs. 5 per cent, P less than 0.01). Pulmonary hypertension was the one condition particularly associated with severe RSV illness. Eight of the 11 infants (73 per cent) with congenital heart disease and pulmonary hypertension died during their RSV illness. The courses in infants with congenital heart disease with and without RSV infection were also compared. Their ages, types of cardiac lesions, and incidence of pulmonary hypertension were similar, but the infants with RSV infection had a higher mortality rate (37 per cent vs. 6.5 per cent, P less than 0.1).