

## Parainfluenza Type 3 Viral Outbreak in a Neonatal Nursery

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### Abstract

*An outbreak of parainfluenza virus type 3 infection that occurred in a special neonatal care unit is described. Birth weights of affected infants ranged from 1860 to 2080 g and gestational ages were between 28 and 32 weeks. Three infants presented with recurrent episodes of apnoea associated with oxygen desaturations on postnatal ages of 16 days, 26 days and 66 days respectively; upper respiratory tract infection symptoms such as coryza were absent in them. Two older infants who had oxygen dependent bronchopulmonary dysplasia presented with worsening of the respiratory status due to bronchiolitis at 5 and 6 months of age respectively. All infants required supplemental oxygen and assisted ventilatory support and there were no deaths. Parainfluenza virus type 3 was identified by direct antigen detection in 3 cases and was isolated in the other two. The outbreak was controlled by isolating the infected infants, use of gowns and strict hand washing. Nonporous surfaces contaminated with parainfluenza virus type 3 were cleansed with water and detergent. Viral respiratory infections should be considered in the differential diagnosis when growing premature infants present with recurrent apnoeic episodes and they may be severe enough to require assisted ventilatory support. The source of the outbreak was possibly a medical officer and a medical student who had an upper respiratory tract infection prior to the outbreak in the nursery. Medical and nursing staff with viral respiratory infections should avoid working in the nurseries until they are well.*

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