

## Respiratory viruses in infants with cystic fibrosis

Background and aim of the study: Viral respiratory tract infections play an important role in children with cystic fibrosis (CF) and are a common cause of respiratory exacerbations. However, the importance of respiratory viruses in infants with CF is unclear. We aimed to examine the frequency of viral infections and how this impacts respiratory symptoms.

Measurements: 31 infants with CF (out of the SCILD cohort) and 32 healthy controls (out of the BILD cohort) were monitored between 5 and 52 weeks of age. Every two weeks a nasal swab was taken and examined for 12 different viruses (in total 1350 swabs). Additionally, a weekly telephone interviews with the parents were conducted to document if the children had respiratory symptoms at the time of the swab collection.

Results: We could show that viruses were detected just as often in CF infants and healthy controls. The most common virus in both groups was the rhinovirus. Symptomatic viral infections were less frequent in infants with CF compared with controls. The factors that are responsible remains unclear, however, early prophylactic inhalation therapy or immunologic mechanisms could lead to less symptomatic viral infections in CF infants than healthy controls during their first year of life.

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