<u>Title: Management of infants with a Bordatella Pertussis (BP) infection at "Hôpital</u> Universitaire Des Enfants Reine Fabiola" (HUDERF), Brussels, Belgium.

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<u>Abstract</u>

Infants who are not completely immunized for BP are at risk of contracting the infection. These infants are often aged between birth and 6 months, which places them in the risk period for SIDS.

While the detection and treatment of the infection is relatively straightforward, the discharge from the hospital is often rapid, and there remains uncertainties as to how the child will fare during sleep while he continues to recover from the infection at home.

At HUDERF, the attitude is to give the child at discharge a CR monitor with a memory, to be used during the child's sleep. The question remains how long should the monitor be used.

This is an observational study of a cohort of 14 infants hospitalised at HUDERF between march 2016 and May 2019. The average age at diagnostic (PCR) was 74 days (median 63; min 26; max 143).

9 of these infants had a polysomnography an average of 65 days after the day of diagnostic (PCR), and 7 of them had a normal PSG. Three infants had an abnormal PSG, with an unusual amount of obstructive events during sleep.

The 7 infants with a normal PSG had an average surveillance time at home (during sleep) of 73 days (median 71; min 46 and max 105 days).

<u>Conclusion</u>: On the basis of the observations described in this short study, it seems safe to recommend that young infants within the 'at risk period for SIDS' who contract a BP infection requiring hospitalization benefit from a home cardio-respiratory surveillance during sleep for an average period of 2 months past infection date.