

## **PS2.059**

### **Whooping cough in a 2 year old patient properly immunized. Medical reemergency of whooping cough in Spain**

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Case report: 2 year-old patient properly immunized consults at the urgency service because of an intense, irritative and wheezy cough intermittent with (periods of asymptomatic intercrisis) of 3 weeks of evolution. The crisis are becoming more intense in the last 10 days. Because of the symptoms we suspect a whooping cough, so we recommend a treatment with azytromicine and salbutamol. A PCR of Bordetella parapertussis and Bordetella pertussis are requested, the last one comes positive.

Conclusions: In Spain, despite of the decrease of the disease thanks to the vaccination since 2011 but in the last years there has been a rise of new cases. The outbreak of whooping cough has shown the risk of people no vaccinated, because of failures of the sanitary system or because of personal decision. The cases among well vaccinated children, even recent vaccination is specially worrying. It could be explained for a decrease of effectiveness caused by the antigenic divergency of Bordetella Pertussis and the components of the actual vaccines, although it would be necessary studies of molecular biology to prove this phenomenon. In an important epidemic in Australia at the beginning of 2008, they discovered genetic modifications that affect pertussis toxine and the peractine. Also it was proved the existence of new strains with a larger production of pertussis toxine. The four strategies recommended in the last decade to prevent de disease is the systematic vaccination of the teenagers, the vaccination of adults, vaccination of pregnant women with TDPA vaccine and the Nido strategy (vaccination of the parents and people with direct contact with the breast-feeding baby).