Title: Perinatal Transmission of Hepatitis C Virus – Hospital Santo André, Leiria-Portugal 2002-2006

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Background: The vertical transmission of hepatitis C virus (HCV) is the main route of infection in children, occurring in rare cases (0-10%). Current recommendations for HCV screening include anti-HCV testing at age >18 months to reduce false positives and false negatives.

Aims: To characterize the population of children born to HCV-positive mothers in Hospital Santo André. To identify risk factors for perinatal HCV transmission and improve approach to HCV screening in our department.

Methods: Retrospective descriptive study of children born to HCV-positive mothers between January 2002 and December 2006. New anti-HCV testing were performed in cases that didn't meet recommendations for HCV screening.

Results: We included 59 children born to HCV-positive mothers in a total of 12 985 births, corresponding to a prevalence of 0.45%. We identified a child with HCV infection without any risk factor for perinatal transmission. Of the children with negative anti-HCV at age 18 months, half had done anti-HCV prior to age 9 months, all positive. Children discharged because of negative anti-HCV at age 9 months were called in a 2nd phase of the study, for new anti-HCV at age > 18 months, beeing all negative.

Conclusions: The perinatal HCV transmission rate was 2.9%. There were no identified risk factor for perinatal transmission in the single case of HCV infection. Regarding anti-HCV at age 9 months, there was a high rate of false positives but no false negative. This study has enabled the detection and correction of mistakes in our approach to HCV screening.