P-205 - EVALUATION OF CUT OFF VALUES FOR 17α-HYDROXYPROGESTERONE BY TWO METHODOLOGIES IN URUGUAYAN PRETERM BABIES

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INTRODUCTION: Newborn screening tests quantify 17α-hydroxyprogesterone (17-OHP), which is elevated in affected infants with Congenital Adrenal Hyperplasia (CAH). Preterms newborns usually have higher values of 17-OHP, so it could cause false positive results. In this study we evaluate the cut off of 17-OHP in preterm infants by two competition assays. OBJECTIVE: Evaluate the cut off for premature infants by two methodologies and compare them with bibliography. MATERIALS AND METHODS: Samples from newborns with 36, 35 and 34 weeks of gestational age (WGA) from September to December 2018, were analyzed for 17-OHP using AutoDELFIA (Perkin Elmer) and NeoScreen 4 (Intercientifica). All samples were from whole blood obtained by heel puncture on filter paper Whatman 903, with less than 3 days of life. Calculations were performed using Microsoft Excel. RESULTS: Cut off values were calculated as 99.5 percentile. During the period studied we received 142 samples from 36 WGA, 85 from 35 WGA, and 40 from 34 WGA. For NeoScreen technology the calculated cut off were: 14 ng/ml, 33 ng/ml, 17 ng/ml for 36, 35 and 34 WAG respectively. Autodelfia shown lower cut off for all the groups: 8 ng/ml, 16 ng/ml and 14 ng/ml. CONCLUSIONS: Values of 17-OHP cut off from premature babies are lower than expected according to the ones reported in the commercial kit from Perkin Elmer. In all cases cut off for NeoScreen 4 are higher than Perkin Elmer. For 34 and 35 WGA we found an unexpected results, so more samples should be tested to establish the final values.