P-195 - TURNAROUND TIMES IN THE PROCESS OF NEWBORN SCREENING FOR CONGENITAL HYPOTHYROIDISM. EIGHTEEN YEARS OF EVOLUTION.


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**INTRODUCTION:** Early and effective treatments are key components for the success of the newborn screening for congenital hypothyroidism. To achieve it, it is essential to control the time of blood sampling and a fast response in the recall process. The use of quality control indicators allows to monitor the activities and take objective actions over the time for the continuous improvements.

**OBJECTIVE:** To evaluate the evolution of two turnaround times (TAT) covering pre-analytical, and analytical, post-analytical and start of treatment in a subset of congenital hypothyroidism patients at higher risk.

**MATERIALS AND METHODS:** Newborn babies with serum confirmatory TSH concentrations above 20 uIU/ml were included. Two TAT were used: TAT1 days of life at blood sampling and TAT2 days of life at the start of treatment. The data of each TAT include information of 3 years, starting in 2001 and finishing at December 2018. For each TAT, data of mean and 90th percentile were registered.

**RESULTS:** 265 congenital hypothyroidism newborns between 2001 and 2018 were included. The number of patients in each time and the mean and 90th percentile for each period for TAT1 and TAT2 were: 2001-2003 (36): TAT1 6.3 and 16.8, TAT2 20.4 and 33.0; 2004-2006 (50): TAT1 4.6 and 12.6, TAT2 14.8 and 23.8; 2007-2009 (33): TAT1 3.3 and 4.6, TAT2 12.1 and 16.2; 2010-2012 (52): TAT1 3.6 and 6.0, TAT2 10.7 and 15.2; 2013-2015 (58): TAT1 3.9 and 8.0, TAT2 10.8 and 17.1; 2016-2018 (36): TAT1 2.7 and 4.0, TAT2 12.6 and 20.0.

**CONCLUSION:** There were reductions in the turnaround times over the years however for TAT2 in the last three years a slight increase was observed. Efforts are still needed for achieving improvements in the TAT2 indicator.