P-217 - FIRST STEPS IN NEONATAL SCREENING FOR CYSTIC FIBROSIS IN CORRIENTES, ARGENTINA

Lecuna E¹, Gomez A¹, Cardozo S², Ropelato N³

(1) Hospital Maternoneonatal “Eloisa T de Vidal”. (2) Hospital Pediatrico “Juan Pablo II”. (3) Direcccion de Maternidad e Infancia. Corrientes-Argentina. lililecu@hotmail.com

**INTRODUCTION:** Cystic fibrosis (CF) is a severe recessive genetic disease, with a high incidence in the Caucasian population. Early diagnosis in the neonatal period can reduce morbidity and early mortality. **OBJECTIVE:** To evaluate the incorporation of neonatal screening for CF for the provincial program through two determinations of immunoreactive trypsinogen (IRT) and sweat test as diagnostic confirmation. **MATERIALS AND METHODS:** Of 8536 samples of newborns (NB) (dried blood on filter paper) received for metabolic screening, 5872 were studied from July 2018 to January 2019, through the quantification of IRT by ELISA method micro-immuno assay. Selection criteria: NB up to 7 days of life and less than 15 days of transit in the first sample, cut-off: 100 ng/ml. The samples with higher values were recalled. Second samples collected before 25 days of age, cutoff: 70 ng/ml. Patients with higher values were analyzed with sweat test. Positive patients were referred to molecular analysis. **RESULTS:** 2664 NB were not investigated for not fulfil the selection criteria. 30 NB (0.51%) presented values higher than the cutoff point in the first sample, 4 NB (0.07%) were positive in the second sample. 1 NB with cystic fibrosis was confirmed at 27 days of age. Among the false positives: 1 trisomy 18, 1 trisomy 21 with renal failure, 1 premature with respiratory and gastric involvement (deceased) **CONCLUSIONS:** Actions for newborn screening for CF in all newborns should be implemented. The local availability of IRT test and the sweat test along with the good response of the provincial network made early detection possible. The sweat test and IRT/IRT protocol were useful for the early detection of CF.