

Monitoring of congenital hypothyroidism in Tucuman, Argentina. Neonatal Screening Program

Luna Claraso M., Chahla R., Graiff O., Elias A., Alvarez Sollazi C., Albarracin M., Granito S., Bazan C.

Instituto de Maternidad y Ginecología Ntra. Sra. de las Mercedes. Hospital del Niño Jesús. Facultad de Medicina, Facultad de Bioquímica, Química y Farmacia. Universidad Nacional de Tucumán

The Neonatal Screening Program of the Province of Tucuman, Argentina, is headquartered in the Neonatal Screening Laboratory of Institute of Maternity and Gynecology Ntra. Sra. de las Mercedes. Receives and processes samples in paper of all the newborns (NB) in 13 hospitals of the 17 departments in the province. Congenital hypothyroidism (CH) is one of six congenital diseases researched (Hypothyroidism, Adrenal Hyperplasia, Phenylketonuria, Cystic Fibrosis, Galactocemia and Biotinidase deficiency). **Objectives:** To assess the prevalence of CH. In children evaluate: comorbidities and sonographic features of thyroid glands. Assess a child's development through its height. **Patients and Methods:** A descriptive epidemiological study. Population Accessible were 139775 newborns whose samples were analyzed at the Neonatal Screening Laboratory in the period 2006-2014. The newborns with suspicion of hypothyroidism were referred to Hospital of Niño Jesús for confirmation, treatment and monitoring. The clinical monitoring is conducted on a monthly during the first semester, every two months during of the second semester, and then every 3 months until to 6 years of life. From 7 years of life they were performed semiannual controls. Laboratory control was performed every two months during the first year of life. The growth control was made considering the SAP curves (Lejarraga et al). **Results:** prevalence =  $76/139775 = 5/10000$ . Concomitant diseases: Down Syndrome 5/76, 20/76 with jaundice. Sonographic features of thyroid gland: 7% (increased), 18% (Hypoplastic), 24% (not displayed) and 7% (structural alteration). Height: 6 children with height value below the 3rd percentile. **Conclusion:** Early diagnosis and proper treatment allowed bone maturation and growth according to chronological age in the most of patients.