Editorial

This issue of eJIFCC was intended to present some important topics on "Neonatal screening". The public-health programme initiated in some countries about 30 years ago include preventive management that aims at early detection, with the use of laboratory-based tests and clinical examination, of specific irreversible disorders in newborns in a presymptomatic phase. Newborns are screened for congenital metabolic disorders such as: phenylketonuria, hypothyroidism, cystic fibrosis but also for congenital adrenal hyperplasia and for virus and parasite infections like CMV, HIV and Toxoplasma gondii.

The incidence of congenital hypothyroidism in US increased between 1978, when the screening was initiated, and 2002 though no definitive causes were identified (Harris KB., Pass KA, Mol Genet Metab 2007, 91, 268-77). Congenital cytomegalovirus infection in newborns is increasing in particular regions of the world. On the other hand, free access for pregnant women to advanced clinical care and appropriate preventive therapies may result in decline in perinatal transmission of virus or parasite infections. Early detection allows effective prevention of developmental disorders in children, especially mental impairment, epilepsy, infantile cerebral palsy and hearing defects. Screening programmes are performed in the whole newborn populations and with the continuous development of knowledge on congenital or transmitted disorders new tests are added to the screening panel and modern technologies such as microarrays are introduced providing new types of informations.

The below included articles cover only a small but important part of "the newborn screening story". The author has been encouraged by Professor Eskild Petersen from Aarhus University Hospital in Denmark to publish papers on screening of newborns for Toxoplasma gondii and for cytomegalovirus infection and by the editor to submit them to eJIFCC.

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