ETIOLOGY OF MICROCEPHALY IN THE MRI ERA

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OBJECTIVES: To know what are the neurological diseases that cause microcephaly after a decade of spread use of MRI (Magnetic Resonance Imaging). METHODS: Head Circumference (HC) charts of 3269 patients visited between 1987 and 1997 in a regional reference neuropaediatric department were reviewed. All patients with at least one HC value below the 2 Standard Deviations for her/his age where included in a etiologic and pronostic study. RESULTS: We found 152 microcephalic patients. The more common causes were developmental delay of unknown etiology, hypoxic-ischemic encephalopathy, heart congenital disease, prematurity and migrational disorder. CONCLUSIONS: Etiology of microcephly is heterogeneous. The use of MRI studies and advances in the treatment of congenital heart disease and prematurity have change the etiological spectrum of microcephaly. The present study, and further pronostic tools we are developing, lead us to the substitution of the sign 'microcephaly' for the syndrome 'head growth failure'.