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Cytogenetic Analysis of Mentally Retarded Patients in Srikakulam

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ABSTRACT The present study is undertaken to analyze the frequency of chromosomal abnormalities in mentally retarded patients (mild, moderate and severe), and to determine the types of chromosomal abnormalities that play a major role in causing mental retardation. Thirty subjects of both gender in the age group of 05-50 years were selected for study from "Behara Manovikas Kendram'' of Srikakulam. Peripheral blood samples were collected from the patients with the help of technicians from TRIMS, Visakhapatnam and the samples were subjected to chromosomal analysis. Physical features like microcephaly, seizures, status of retardation etc., were also noted. The metaphase studies clearly revealed 5p deletions, Mosaic Down syndrome, 5q additions. One case revealed translocation in 9 and 17 chromosomes which also showed blast cells in Blood Smear. Chromosomal abnormalities play a vital role in causing mental retardation and its frequency increases with severity of mental retardation. We concluded that chromosomal studies in mentally retarded patients help in accurate diagnosis and proper prognosis followed by genetic counseling and management rehabilitations.