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Abstract Topic: - Prenatal, perinatal and developmental genetics

Abstract Title: - Chromosome Aberrations In Patients With Hydronephrosis

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Aims: - The focal aim preset study was to analyse the major chromosomal aberrations (CA) in hydronephrosis, including deletion, translocation, inversion, and mosaic.

Methods: - 17 blood samples in all were obtained from different hospitals. Equal numbers of normal, healthy volunteers were selected after completing a permission form. 2 ml of blood were provided by volunteers to develop leukocyte cultures. Giemsa-banding was used to conduct cytogenetic research, and Fluorescent In-Situ Hybridization (FISH) was then used to confirm the findings.

Results: - Major CAs such deletions, translocations, inversions, and mosaics were found in the experimental individuals of the current study. The results revealed that CA was common on chromosomes 3, 4, and X. The control participants showed relatively less significant CA in compared to experimental subjects (P 0.05).

Conclusions: - The high frequency of centromeric rearrangements in the current research suggests that mitotic abnormalities connected to the centromere may have a role in paediatric hydronephrosis. Finding chromosomal abnormalities may aid in better understanding the underlying biological causes of the medical state.

Keywords: - Major CAs such deletions, translocations, inversions, and mosaics were found in the experimental individuals of the current study. The results revealed that CA was common on chromosomes 3, 4, and X. The control participants showed relatively less significant CA in compared to experimental subjects (P 0.05).