

## Pediatric Developmental Delay: Spectrum of MR Findings

Najmal Nazeer\*, S. Lalwani\*\*, Kavita Srivastava\*\*\*

Bharati Vidyapeeth Deemed University Medical College, Pune, India

E-mail: nimmu81@gmail.com

### Aims & Objectives

To study spectrum of findings on MR in developmental delay.

### Materials & Methods

A hospital based retrospective study was done over a period of 1 year (June 11–June 12) with patients in pediatric age group (Birth–18 years), presenting with history of developmental delay primarily or secondarily in association with other presenting complaints who underwent MR brain with/without contrast. Sedation was used wherever necessary under the care of anesthetist. The results were tabulated into columns of age, sex, presenting complaints and summary of findings on MR. The results were interpreted statistically.

### Results

A total of 75 patients were studied on MR. The most

commonly encountered abnormality was periventricular leukomalacia with / without thinning of corpus callosum. Widening of CSF spaces was also seen. Other less commonly encountered causes were TORCH infections, Rasmussen's encephalitis, Kearne Sayre syndrome, semilobar holoprosencephaly and lissencephaly.

### Conclusions

Developmental delay encompasses etiologies with varying imaging findings which pose a challenging task for a radiologist and pediatrician. The underlying cause remains a mystery despite extensive clinical examination and laboratory investigations. What happens to a child in the early years of neurodevelopment stays forever. MR imaging gives a leading insight into ongoing pathological changes in the brain and helps narrow down the possibilities for initiating timely treatment.