Editorial Message

Dear Colleagues,

It gives me great pleasure to place before you the July issue of this year, which contains the presidential address, two original articles, one review article and one case report. I hope that some more speakers at the last year's conference also give their work for publication in the journal following the lead taken by Prof PN Tandon.

The spectacular advances in neurosciences in the last couple of decades have made it possible to not only explore but also to modify the function of human brain, even human mind and consciousness at such levels that it has aroused concerns about their ethical implications. **Prof PN Tandon** in his Presidential Address on Neuroethics delivered at the Silver Jubilee Conference at Varanasi last year deals with the various aspects of this.

Peroxidation of cellular membrane lipids, or circulating lipoprotein molecules generate highly reactive aldehydes among which one of the most important is 4-hydroxynonenal (HNE), which is a highly reactive molecule due to Ü, â unsaturation. At low concentrations, HNE is involved in cell signaling whereas high concentrations of HNE are cytotoxic. **Siddiqui et al**. have examined the metabolism of HNE in PC-12 cells and studied its cytotoxic effects. They have also looked at the effect of nontoxic concentrations of HNE on neurotransmitter receptors. At low concentrations, HNE is primarily metabolized by glutathiolation and oxidation, whereas at higher concentrations, in addition to glutathiolation and oxidation a significant fraction of HNE is reduced in PC-12 cells.

Zidovudine is used in pregnant HIV positive women to prevent transmission of infection to the baby. Zidovudine exposure during prenatal period is associated with alterations in brain morphology and function in the baby. **Rajalakshmi et al** have assessed the neurobehavioral effects of one stage zidovudine exposure during pregnancy and lactation in F1 and F2 generation of mice. Their results suggest that neurobehavioural functions are affected in F1 generation and there is recovery in F2 generation. Recovery in F2 generation beyond normal profile could be due to activation of oncogenes as a result of chromosomal alterations.

The primary human brain tumours account for less than 2% of all human cancers but yet cause a disproportionate burden of cancer related morbidity and mortality. Research in the past four decades has resulted in no improvement in the survival of these patients. A variety of chromosomal alterations have been reported for various brain tumours. The p53 gene is one of the most important and intensely studied human tumour suppressor gene. **Gope et a**l have reviewed the functional modulation of p53 gene in human brain tumour development.

Cognitive and behavioral problems are common in children with West syndrome. These behavioral disorders further impair the educational and social developmental of such children. **Agarwal et al** report a case of treatment resistant Attention Deficit Hyperactivity Disorder as an outcome of West syndrome.

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