Dear Colleagues,

It gives me great pleasure to present the October issue of this year to you. It contains one original article, three review articles and one case report. I have now started receiving articles from newer centres / institutes, however the total number of contributors is still low. This is the main reason why I have not been able to get our journal indexed although I have been promising to do so for the last two years now. One of the main requirements by all indexing agencies is timely publication of the journal containing enough good quality peer reviewed articles. I have been able to bring out all the four issues every year in time for the last few years now but I cannot do anything to the number of articles that I receive. Despite my best efforts I have failed in my endeavour and I hope my successor from the next year may be able to get more cooperation from the honourable members and thus be more successful.

Apolipoprotein (APOE) plays an important role in the whole body cholesterol homeostasis. Recent studies suggest that it may also be involved in the local cholesterol transport in the brain and may have an important role in the pathogenesis of Alzheimer’s disease. The expression of APOE is highest in liver followed by the brain. It has been hypothesized that dietary and hormonal interventions which regulate hepatic APOE may also regulate brain APOE. Srivastava et al tested this in mice given high fat and cholesterol enriched diet for three weeks. Their results show that cholesterol feeding raised brain APOE mRNA similar to the liver.

Matrix metalloproteases (MMPs) are a family of zinc dependent extracellular proteases that participate in the modification of the extracellular matrix. MMPs play a complex role in the development, remodeling, signaling, and inflammation within the nervous system. The balance between expression of MMPs and their endogenous tissue inhibitors has important implications for the healthy nervous system as well as pathogenesis and recovery in disease or injury. Pearce et al have reviewed the role of MMPs after acute processes such as stroke and traumatic spinal cord injury (SCI) as well as in chronic conditions such as neuropathic pain. Studies evaluating the effect of MMP inhibitors following acute SCI have reported encouraging findings including reduced inflammatory response, decreased tissue damage and improved locomotor activity. Neuroprotective effects regarding the use of MMPs have been reported following cerebral damage. The MMPs have thus generated considerable interests as possible therapeutic targets.

Acetylcholinesterase (AChE) is one of the most efficient enzymes of the nervous system which is concentrated at the cholinergic and neuromuscular synapses where it rapidly hydrolyses the neurotransmitter acetylcholine (ACh). The importance of AChE in the body is underscored by the fact that it is the target of the most potent toxins including insectisides, snake venom, and chemical weapons. Tripathi and Srivastava have reviewed its biochemistry, molecular structure and histochemical distribution pattern in the neuronal and non neuronal tissues. Studies about the regulation of AChE expression unravel the importance of post transcriptional events in vivo which may ultimately lead to the design of additional therapeutic strategies aimed at promoting neuronal regeneration and survival.

Neuropeptides are chemical structure secreted by the neurons, which play an important role in controlling different brain functions of an insect and its behaviour. There is a paucity of work on the neuropeptide and juvenile harmones of the silk worm, Antheraea assama Westwood and Philosamia ricini Biosduval. Unni et al report that application of juvenile harmones and its analoguous increases the larval body weight, cocoon weight and silk shell weight. This can be utilised in sericulture for better silk yield in terms of quality and quantity.

Continuous muscle fibre activity syndrome describes a rare heterogenous group of conditions that exhibit sustained, diffuse motor unit activity due to hyperactivity of peripheral nerve motor axons. Chaurasia et al report a case in a worker of a smelting factory where the levels of lead and silver were increased.

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