MEETING REPORT

International Symposium and IABMS Annual Conference 2005*

There is increasing appreciation about the relevance of the holistic system of medicine. This has augmented scientific interest in medicinal plants and herbal products. India has a vast reservoir of medicinal plants and a long tradition of using herbal products for healthcare. It is therefore important to secure a better understanding of medicinal plants and herbal products in the treatment of diseases and in enabling healthier life.

For the above-mentioned reasons, S.N. Pradhun Centre for Neurosciences, Calcutta University (CU) had organized a symposium. Participants came from all over India and abroad.

Debjani Guha (S. N. Pradhun Centre for Neurosciences, CU) in her welcome address stated that considering the huge natural resources in India, development of modern medicines from plant sources is essential. Potential therapeutic components can be developed from these resources by collaborating in the field of herbal research. Besides herbal drugs, there is widespread use of botanicals as medicinal products in developing countries. Such products are becoming a part of the integrated healthcare systems in industrialized nations.

Dhrubajyoti Chattopadhayaya (CU) in his keynote address stated that India, with its vast traditional knowledge base of herbal usage for medicinal and other purposes, is ideally poised to enter the world market in a positive manner.

In the plenary session, Uma Roy (CU) speaking on ‘Psychopharmacological profile of psychotropic and indigenous drugs with special reference to their antiaggressive properties’, stated that drug control of violence has been the subject of great interest due to recent advances in psychopharmacological aspects of violence and aggressive behaviour. Since acceptable parameters of psychopharmacological screening are yet to be determined, several experimental schedules have been adopted to evaluate the efficacy of psychoactive psychopharmacological agents, including herbal medicines on different animal models of aggression.

In another plenary talk, A. K. Singh (DRDO, Delhi) spoke on ‘Radiotracers in drug development’. Nuclear medicine is a frontline diagnostic imaging modality available at the tertiary level of healthcare system. Apart from direct functional imaging of body functions, quantification makes it possible to obtain dynamic parametric information not possible by any other non-invasive system. Nuclear medicine imaging is based on complexation of a chemical (or a drug) with a suitable radioactive element which is then called a radiopharmaceutical. However, the only stringent requirement of radiopharmaceuticals (chemicals or drugs), he stated, is that radioactivity should not dissociate in vivo from the parent chemical and that the biological/chemical activity of the radiopharmaceutical should not be significantly different from the present compounds.

Debjani Guha (S. N. Pradhun Centre for Neurosciences, CU) spoke on ‘Stress hypertension and effect of tea’. She described in detail the study of the effect of black tea extracts on stress and hypertension in both animals and humans.

A. Subramoniam (Tropical Botanical Garden and Research Institute, Palode), spoke on ‘Promising plants in the development of new life-saving drugs for viral and fungal diseases’. According to the speaker, in the absence of satisfactory drugs against most of the viral diseases, ethno-medical folklore medicinal plants used in India, for the treatment of viral diseases, appear to be promising for development of safe and effective drugs. He described in detail recent studies carried out in his institute that have brought to light the potent in vitro antiviral activity of active fractions from Ocimum sanctum leaf and Rhinacanthus communis leaf against herpes simplex virus, measles virus, coxsackie virus and polio virus.

In the oral section, Rimi Hazra (Emory University, Atlanta, USA) spoke on studies on two herbal plants, Acorus calamus and Moringa oleifera, on behaviour, brain monoamines, etc. exposed to hypobaric hypoxia. Her talk included assessment of the influence of these medicinal plants on hypobaric hypoxia by behavioural, electroencephalographic study and brain monoamines estimation.

E. Murugar (University of Madras, Chennai) spoke on isolation, structural characterization of new flavonoids from Allium cepa and their biochemical activity. The structures of compounds established by extensive use of UV–Vis, FT–IR, FT–NMR and ESI–MS techniques were depicted in detail by the speaker.

The poster session included topics on ‘phenolic group content of plants’, development of databases for the fruits available at Kodai kannal, antimicrobial activity of selected medicinal plants, etc.

A workshop on modern techniques in neuroscience research was also organized within the seminar entitled ‘Dr Sarada Subramanyan Workshop’. The items that were demonstrated included stereotactic localization and histochemical identification of different brain areas, biochemical and molecular techniques for neurological disease diagnosis and behavioural studies in humans and animals.

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