



Conference Report

Shotha and the Unified Theory of Inflammatory Diseases 2017

Members of Molecular Biology Unit (MBU), Institute of Medical Sciences (IMS), Banaras Hindu University (BHU) in association with the Institute of Molecular and Ayurvedic Biology (IMAB), Gorakhpur organized a one day National Symposium on “Shotha and the Unified Theory of Inflammatory diseases” on February 7th, 2017 in Varanasi, India. The event was attended by leading Molecular Biologists, Ayurvedic Experts, Modern Medicine Doctors and Material Scientists.

The morning session of ‘Shotha (Swelling) – The Great Disease’ started with a talk delivered by Emeritus Prof. SC Lakhota, Department of Zoology, BHU. He emphasized the validation of Ayurvedic formulations in synergy with scientific studies to elucidate underlying molecular mechanisms. Scientific re-interpretation of Ayurveda in the current trends of genetics, genomics, cell and molecular biology as well as modern human physiology will help us to understand Ayurvedic principles in unbiased manner [1]. He found that the neuroprotective effects of *Amalaki Rasayana* and *Rasa Sindoor* in a fly model is mediated through enhanced heterogeneous RNA-binding proteins (hnRNPs) and cAMP response element-binding protein (CBP) level, improved proteasomal activity, reduced cell stress and inhibition of apoptosis [2]. Padma Shri Prof. Ram Harsh Singh of Department of Kayachikitsa, BHU suggested that molecular biologists must understand the concept of Ayurvedic principles for paving the path of Ayurvedic biology using modern research strategies. He discussed *Ojas*, *Ojabala*, *Baladosha* and *Vyadhikshamatva* as components of *Ayurvedic Immunology*. He mentioned that the formation of *Ojas* from the nourishment and the process of *Vyadhikshamatva* are critically promoted by *Ayurvedic Rasayana*. In addition, *Ayurvedic Rasayana(s)* provide longevity, mental competence, youthfulness, effective speech, glory, rejuvenation through effects on *Agni* and *Srotas* [3].

Dr. Pallatheri Nambi Namboodiri of Nagarjuna Ayurvedic Center, Kerala explained the use of *Panchkarma* (Panch-five, Karma-procedures) in the resolution of maladies caused by inflammation. Elimination of toxins through *Panchakarma* includes *Shodhana* (cleansing) and *Shamana* (pacification). Specifically, *Vasthi*, *Virechana* and *Vamana* procedures are prescribed for *Vataj*, *Pittaj* and *Kaphaj Shotha* respectively. Dr. Vijay Verma of JP Health Paradise, Haridwar, through his case study described the use of *Panchkarma* for the management of critically ill patients in the intensive care unit (ICU) and neonatal-ICU. He reported that with the use of *Snehana* and *Vasti*, for tertiary stage of various diseases, significantly reduced mortality and morbidity.

Second session on ‘Unified Theory of Inflammatory Diseases’ started with a talk by Prof. SD Dubey, Dravyaguna, BHU. While

discussing *Agni*, *Aam* and *Shotha*, he correlated reduced *Agni* with *Aam* production and further extended the concept of *Shotha*. Prof. CB Jha, Rasa Shastra, BHU discussed the nature of *Shotha* and the way it manifests and suggested management of *Tridoshic Shotha* by Ayurvedic drugs. Dr. Rupesh Chaturvedi, School of Biotechnology, Jawaharlal Nehru University, New Delhi, focused on the role of NF- κ B1 (p50) in gastric cancer caused by *Helicobacter pylori*. His novel observation shows that loss of p50 causes reduction in the levels of genes expression for histone deacetylase complex and may globally regulate the gene involved in the polarization of the macrophages which leads to immune tolerance in the host [4]. Dr. Sunit K. Singh of MBU, BHU discussed the adverse effects of neuro-inflammation on brain in neurodegenerative diseases such as AIDS (Acquired immunodeficiency syndrome), JE (Japanese encephalitis) and Mennigitis. JE virus down-regulates host microRNA-432 to promote its pathogenesis [5]. Prof. Rajavashisth Tripathi, MBU, BHU and Convener and Organizing Secretary of this symposium concluded the afternoon session with emphasis on the effectiveness of the Ayurvedic concepts in the modern age and asserted that *Ayurved Enterprise of India* should focus on promoting the definition of perfect health as mentioned in the Ayurvedic literature to the world community. He discussed the “*Shotha and the Unified Theory of Inflammatory Diseases*” mentioning that relatively minor inflammation stemming from injuries, infections, allergies, diets, lifestyles or plain aging, if not controlled well, can have chronic systemic effects. After many years, sustained and runaway inflammation can set the stage for more serious inflammatory diseases. Humanity is in need to overcome the toxic effects of dysregulated inflammation as soon as possible and concepts mentioned in Ayurveda must come to the rescue [6].

Prof. Anand K. Chaudhary, Department of Rasa Shastra, IMS, BHU and Prof. Brahmeshwar Mishra, Department of Pharmaceutics, Indian Institute of Technology-BHU chaired the sessions.

This symposium provided the best opportunities for the participants to scientifically interact with leading experts. During panel discussion, experts mentioned that careful resolution of *Shotha* formed one of the central principle in treating pathological conditions through drugs, diet or life style modifications in Ayurvedic System of Medicine. A broader and deeper understanding of shotha or inflammation by combining molecular biological and Ayurvedic knowledge can lead to exciting new advances and identification of new biomarkers and strategies for preventive and clinical therapies. We are on the precipice of the right time to apply molecular biological data with Ayurvedic literature, and Ayurvedic data with molecular biological literature, to continue beneficial crosstalk from both sides.



Conflict of interest

None declared by authors.

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