



**Upendranath Brahmachari - A pioneer of Tropical Diseases by Rajinder Singh, published by Shaker Verlag GmbH, Germany paperback, pages 204**

It is a pleasure to read the book entitled “Upendranath Brahmachari - A pioneer of Tropical Diseases”. The book deals with a body of scientific work by Brahmachari. The book consisted of six major chapters covering biographical facts to his major research activities. It is a painstaking work to compile all the information since reference materials are not readily available. It describes that the time of Brahmachari’s birth coincided with the outbreak of an epidemic in the Indian subcontinent, caused by an unknown disease which was later designated as kala azar. Subsequently the causative agent was identified and named as *Leishmania donovani* in 1903 after the name of the two discoverers, William Leishman and Charles Donovan.

In early years, trivalent antimonials were introduced for the treatment of kala azar but these had serious side effects. Meanwhile Paul Ehrlich had developed the organic arsenical Atoxyl for the treatment of sleeping sickness and established the first nucleus of experimental chemotherapy. Brahmachari was perhaps inspired by the work of Ehrlich and in 1920 he combined p-aminophenyl stibanic acid with urea to prepare Urea stibamine, the first pentavalent antimonial drug designed to treat kala-azar. It was also possibly the second chemotherapeutic in the world which was discovered long before penicillin. I wish the author

had made a mention of this important milestone in the history of kala-azar research.

After the introduction of the drug, the death rate fell dramatically in the Gangetic plains and Brahmaputra valley, the epicenter of kala azar at that time. The drug received glorious recommendation as evident from the report of kala azar commission which was constituted by the British Empire. Therefore the discovery of Urea stibamine by Brahmachari is a monumental work which was amply rewarded by its clinical success. The drug is in infrequent use in the Indian sub-continent currently but still in use in African nations in the endemic foci of leishmaniasis. It is not difficult to appreciate the fact that approaching hundred years of discovery for the treatment of kala-azar the drug continues to be in use when many other more fancied antibiotics or drugs have fallen by into disuse long ago.

Brahmachari had the unique blend of expertise in organic chemistry and a thoroughly clinical eye. These two important attributes combined to lead him to discover a unique sequel of development of skin lesions, known as Post-Kala azar dermal leishmaniasis, which manifests after the clinical cure of the visceral form of the disease. The book also describes the view of certain quarters about the controversy related to the composition of Urea stibamine. But it needs to be stressed that it was never withheld from public and was never patented. This sounds remarkable in the current scenario of drug research, when the success of a drug is judged more by its sales figures than by its capability to fight a scourge.

The book has fittingly highlighted the contribution of the clinical scientists of Calcutta School of Tropical Medicine in the transmission of kala azar. But Brahmachari’s territory of research was not restricted to kala azar only. He had also made significant work in other areas of tropical medicine like malaria, cholera, filariasis, and leprosy, to name a few, and also to metabolic disorders like diabetes. I feel that this is an outstanding effort and a befitting tribute to a personality whose life was a real struggle for the promotion of medical science in the service of mankind. I wholeheartedly endorse this book to be read by the students and researchers alike of Tropical Medicine.

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