Dr. Yellapragada Subbarow (1895-1948)

P Dashatwar

Subbarow was the man behind development of many wonderful drugs such as tetracyclines, aminopterin, hetrazan, polymyxin B and gramicidin. He also made some fundamental discoveries in biochemistry.

He wanted to serve Ramakrishna Mission but Swami urged him to take up medicine. So Subbarow graduated in Medicine from Madras Medical College. After unsuccessfully trying to enter Madras Medical Services he took up a position of lecturer in anatomy and physiology at an ayurvedic medical college. Although a student of allopathy Subbarow was greatly impressed by Ayurvedic Medicine, which had cured his tropical sprue. He took a genuine interest in Ayurveda and made an attempt "to place the innumerable Indian herbs on a standardised basis so they will be of use to practitioners of all systems of medicine" but soon he was disillusioned with the limited resources and attitude of administration of the college.

Death of his two brothers due to tropical diseases fuelled his already strong urge to pursue higher studies in tropical medicine at Harvard Medical School. His association with Ayurveda did not particularly impress the people at Harvard. But his perseverance earned him the admission albeit without fellowship. Since his Indian certificate was not recognised by hospitals in Boston, he had to work as night porter at Peter Bent Brigham Hospital at 50$ a month wages to make ends meet.

After obtaining diploma in June 1924, he started working with Cyrus Hartwell Fiske in biochemistry department at Harvard. Working with Fiske he developed the Fiske-Subbarow method of colorimetric estimation of organic, inorganic and lipoid phosphorus in blood and urine. The paper written by the duo on this topic is one of the 100 most cited papers according to Science Citation Index. Subbarow further continued his studies on organic phosphorus and revealed many mysteries of muscle contraction. In the process he discovered ATP and phosphocreatine, which subsequently earned him PhD.

In 1940, he moved on to Lederle Laboratories as Director of Research and Development. Here he made most of his drug discoveries and also isolated and synthesised folic acid and anti-pernicious anaemia factor (vitamin B12). His drugs have stood the test of medical practice over a half-century. This great man who made miracle drugs died in his sleep on 8th August 1948.

*Student, TN Medical College & BYL Nair Ch. Hospital, Mumbai 400 008.