

THE EVOLUTION AND CHRONOLOGY OF ANCIENT INDIAN MEDICAL SCIENCES*

ASOKE K. BAGCHI**

The science of ancient Indian medicine or the Hindu medicine is well known as Āyurveda. It is claimed to be as old as the Vedas. It is the Atharvaveda which deals more than other Vedas with Medicine. In that text there are lists of mineral and vegetable drugs as well as contemporary concepts on the causes of various diseases. There is a hymn on the creation of man, in which the skeletal anatomy of man is systematically enumerated.

According to Hindu mythology Brahmā is said to be the creator of the Universe and in ancient Indian medical literature we also find him as the originator of Āyurveda. The very name of Brahmā is interesting from the standpoint of comparative philology. If the last letter "Ā" of the word Brahmā is transposed to the beginning of the word, a new word Ābrahm is formed. Is this merely a chance finding or the mythical Brahmā of India is the same historical personality as the Biblical Ābrahm? Both the above persons were exceptionally intelligent individuals. In the Indian mythology Brahmā is said to have possessed four heads. It is nothing but the symbolic concept of a superman with intelligence of four-in-one.

Our present day knowledge of Hindu medicine is mainly derived from the works of Suśruta, the surgeon, and Caraka the physician. It is also supplemented by the works of Vāgbhaṭa. The main work of Caraka is known as Caraka samhitā in which Āyurveda has been described as an eternal science. It is said that in the beginning, the science was only known to Brahmā who handed it down to a learned man named

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** Professor of Neurosurgery & Head of the Department of Neurology, Nil Ratan Sircar Medical College, Calcutta and Honorary Historian, Neurological Society of India.

Prajāpati Dakṣa. He transmitted it to the two great physicians of the assembly of Hindu gods known as the Aświni Kumāras. They were the twin sons of the Sun god and his consort Saṅgā who was in the guise of a mare (Sk. Aświni) while she conceived of those two prodigious children. In the Greek mythology the name of Chiron a centaur (half horse and half man) is well known. So, both in Hindu and Greek mythology there are references to horses in the evolution of medical sciences. Moreover, in the name of *Hippocrates Heraclide*, the father of western medicine, the word "hippo" meaning a horse is incorporated. The word *hippo* is a close relative of the Sanskrit word *ikka* also meaning a horse. The above citations based on comparative philology are conducive to prove that the mythological sources of the Hindu and Greek medicine must have been identical.

The great Aświni kumāras taught medicine to the king of gods Indra. According to Suśruta, Brahmā composed only about one hundred thousand verses of the Āyurveda which were arranged into one thousand chapters. From Indra the knowledge of medicine was brought down to the earth in two different streams. Indra taught the treatment of all kinds of diseases to the sage Bharadvāja who imparted his attainment to Ātreya. Ātreya had six pupils, Agniveśa, Bhela, Jatūkarna, Parāśara, Hārīta, and Kṣārapāṇī. Each of them wrote a separate treatise on Āyurveda with his own conceptual commentary. Of those only two are now extant, the Aganiveśa samhitā and the Bhela samhitā.

Ātreya always advised his pupils to have faith in Atharvaveda because it dealt with the treatment of diseases in the form of oblations, expiations, fasts and chanting of hymns. If we consider the origin of the *Vedas* to be as early as 2000 B. C. we may find that in ancient times Indian medicine contained lots of mystic elements. It is strange that nowhere in the four Vedas the term Āyurveda is ever mentioned; it must have been of later development.

The name of Ātreya is also very interesting from the standpoint of comparative philology. It sounds similar to the Greek word *Iatros* meaning a physician (cf. Pediatrics, Geriatrics etc.). In Arabic a medicine man is called an Attār. So, one must try to realise that the phonetic and etymological similarity between those three words must have some reason.

It is said that Dhanvantari, a physician to the assembly of gods was assigned by Indra to impart surgical knowledge to humans. In the earth he came to be known as Divodāsa or Kaśīrājā. Of all his disciples Suśruta proved to be the most outstanding. Therefore, to summarise one could understand that two disciplines of Āyurveda developed, the school of physicians following Bharadvāja and Ātreya and the school of surgeons following Dhanvantari and Suśruta.

The chronological estimation of the dates of the various personalities of ancient Indian medicine is an extremely difficult task. However, we have two sets of historical dates for reference such as the life span of Buddha between 550 and 470 B. C. and the invasion of India by Alexander the Great of Macedonia between 327 and 325 B. C. It is very hard to determine the exact dates of Suśruta and Caraka. But it is generally regarded that the former lived in the 6th century B. C.

Ātreya and Suśruta : Buddha was born in 550 B. C. in the Lumbini gardens of eastern Nepal. The Buddhist folk lores described that at the time of Buddha there were two great universities in India, one at Kāśī or Vāranāsī in the east and another at Takṣaśīla or Taxila in the Punjab. Ātreya was the physician teacher at the Takṣaśīla university before the time of Buddha. Therefore, Ātreya's date can be fixed approximately about the sixth century B. C. The date of Suśruta can be more precisely calculated to be also about the same. Suśruta was a younger contemporary of Ātreya or may have been a colleague of Agniveśa, a pupil of Ātreya.

Caraka and Dṛḍhabala : The Agniveśa samhitā was written in about the sixth century B. C. It was revised and redacted by Caraka in the first century A. D. It is said in Chinese Buddhist chronicles that, Caraka was the noted court physician of the Indo-Scythian king Kanishka whose kingdom extended from Afghanistan to Mathura in Uttar Pradesh. Caraka could not complete the task of editing the Agniveśa samhitā which was later redacted by Dṛḍhabala, who lived in *Pancanada* (Panjab?).

It has been later found out that the original Suśrutā samhitā was written in about the sixth century B. C. Subsequently, a supplementary

portion called the Uttarantra was added to it by some anonymous author. This supplement is also called the Suśruta samhitā. In order to distinguish between the two authors, indologists designate the earlier one as the Vṛddha Suśruta or Suśruta the elder. The younger one, the Suśruta II has been identified as Nāgarjuna, the well known Buddhist patriarch who lived probably in the 1st century A. D. Nāgarjuna was a leading director of the Ind-Scythian king Kaniṣka's council which was held in about 78 A. D. He was therefore a close contemporary of Caraka. He was born in *Vidarbha* in central India in a Brahmin family and was converted to Buddhism. He preached the teachings of Buddha in Southern India. Later historians confused the issue by identifying four different Nāgarjunas in place of one, of which one was a great scholar in medical sciences. It is said that the place Nāgarjunakonda in the Krishna river valley of the Andhra pradeś in India was named after him. He sent many Buddhist emissaries and scholars across the Bay of Bengal and the Indian ocean to distant places like ancient Malaya, Indonesia, Siam, Anam, Laos and Cambodia. The profusion of Sanskrit words in the present languages of those countries still bear the testimony to the fact.

Vāgbhaṭa I and Vāgbhaṭa II ; The former was conversant with both Caraka and Suśruta samhitās. He redacted the essentials of those and produced a compendium of Āyurveda known as the Aṣṭāṅga saṅgraha or the summary of the eight parts of medical sciences. Itsing, the Chinese raconteur who was a resident for ten long years (675-685 A. D.) in the Buddhist monastery at Nālandā in Bihār, stated in his records that, the eight parts of medical science existed as eight separate books which one person compended into one volume. So, Vāgbhaṭa I can be placed early in the seventh century A. D.

Later to him another scholar transformed the Aṣṭāṅga saṅgraha from its prosaic form into verses called the Aṣṭāṅga Hṛdaya samhitā. The author of the same is identified as Vāgbhaṭa II, who has acknowledged his indebtedness to Vāgbhaṭa I. Vāgbhaṭa II lived between the 8th and 9th century A. D.

Mādhava : There is a book in Āyurveda called the Nidāna which is the first ever Indian book in which the author tried hard to explain the evolution of diseases. So, it could be called the first attempt by our

ancient medical scientists to produce a text on pathology. The author of this book was Mādhava who lived in the 7th or the 8th century. This book has been widely translated by Arabian scholars in medicine. The book is well known as the Nidān in Arabia and other countries where the Arabians established their rule and culture. Copies of the Nidān in Arabic can be still seen at the library at *Al Hamra* in Spain.

We may therefore see that three great medical authors Mādhava, Dr̥ḍhabala and Vāgabhaṭa II lived in the period from the 7th to the 9th centuries.

There are many other commentators on the Āyurveda of which the name of Chakrapāṇidatta is very famous. His commentary on Caraka samhitā is known as Caraka Tātparya ṭīkā (the meanings of Caraka's thoughts). The book is also known as Āyurveda Dīpikā meaning the light of the science of life. His commentary on Suśruta samhitā, is called the Bhānumatī. He lived in the 11th century. Another author known as Śivadāsa Sena redacted Caraka samhitā into Caraka Tattva Pradīpikā. He also wrote a commentary on Cakrapāṇidatta's edition of Caraka samhitā. The new text was called the Tattva Candrikā.

The most important commentary on Suśruta samhitā was the Nibandha Saṅgraha, which was written by one Dalhaṇa in the 12th century. Another author Gayadāsa wrote a commentary on the same earlier to him in the 11th century. Various other commentators on Āyurveda like Aruṇadatta, Śrīkaṇṭhadatta lived in the 13th century.

From the mythological beginnings of the Āyurveda and the approximate estimation of its dates according to the Gregorian calendar, ancient Indian medical science propagated to Cnidia in Asia Minor from where it entered into ancient Greece. It was taken into Iberia by the Moorish scholars and is still to be found in the archives and bibliotheks. Ancient Greek medicine is indebted to Hindu medicine. Names of many indigenous drugs are found in the works of Hippocrates. To name a few one could mention Kardamomon from Sanskrit Kardama. Pepri from Sanskrit Pippali, Zingiberis from Śṛṅgavera. Many Greek medical terms are also derived from Sanskrit such as Phlegma from Śleṣma, vagina from *Vaga*, vulva from ūlva and a few hundreds of others lately

listed by the present author in his work entitled 'Sanskrit and Modern Medical Vocabulary—A Comparative Study'.

Keeping aside the mystic elements in Hindu medicine, its scientific component has benefitted both the worlds of oriental and occidental medical science. Modern medicine is still indebted to our great contribution to pharmacology. Sarpagandhā (Rawolfia serpentina), the drug is as essential as air and water to millions of hypertensives living in this ultramodern world full of marvels of modern sciences.

SUMMARY

The article briefly gives the evolution of Āyurveda. The words relating to medicine in Sanskrit, Arabic and Greek mythology are compared. Brief notes are given on Aświni Kumaras, the vedic physicians, Dhanvantari and classics of Ātreya, Suśruta and Vāgbhaṭa and on commentators of classics and other authors along with their probable dates.

सारांश

प्राचीन भारतीय चिकित्सा विज्ञानों का विकास तथा कालक्रम

ले० अशोक बागची

प्रस्तुत लेखमें आयुर्वेद के विकास को संक्षेप में दर्शाया गया है। संस्कृत, अरबी तथा ग्रीक पौराणिक कथाओं में प्राप्य आयुर्विज्ञान से सम्बद्ध शब्दों की तुलना की गई है। धन्वन्तरि और वेदकालीन देवताओं के चिकित्सक अश्विनीकुमारों के अलावा चरक-मुश्रुत-वाग्भट की ग्रन्थरचनाओं, उनके टीकाकारों और उनके सम्भावित कार्यकालों से सम्बद्ध संक्षिप्त टिप्पणियाँ भी दी गई हैं।