



## Contribution of Chakrapani Datta on Charak Samhita in the context of contemporary development of medical knowledge and clinically significant terminologies

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**ABSTRACT:** In the ancient period Charaka Samhita was the best medical treatise and was written by the high intellect medicos who were classically followed by the then medical practitioners because of his classical validity and effectiveness. In due course of time, quality of the degree of medical personalities was degraded as a result of which it was required to explore the nut shell keys. Chakrapani Datta had tried to magnify of the encapsulated keys with his profound clinical observation and discovered the treasures of Charaka Samhita with its stalwart commentary by synchronizing the scattered thoughts of Charaka Samhita. No study has yet been carried out in respect to specialty wise thoughts written by Chakrapani Datta and therefore this work will important inclined the Ayurvedic practitioner to achieve the knowledge in specific. The current report is therefore focussed to search the terminologies in the writings of Chakrapani Datta having clinical importance and to evaluate the clinical contribution of Chakrapani Datta with special reference to Charak Samhita.

**Keywords:** Nanophytomedicines, Bioavailability, Bioactivity, Nanotechnology, Drug delivery

### INTRODUCTION

Chakrapani Datta (11th century), an Ayurvedic physician and scholar, was born in the village of Mayureshwar in the Varendra region (presently Birbhum district of West Bengal). He was the son

of Narayan Datta, the head of the kitchen of Nayapala, the king of Gauda. Naradatta, a courtier of the king, was Chakrapani's spiritual guide. Chakrapani has contributed several important books on ancient Ayurvedic medical science.

One of the prime literatures of Ayurveda on General Medicine is 'Charaka Samhita'. In Charak Samhita, two types of writings are furnished, principles and applications. Commentators always try to explore the terms and theories as well as the ingredients, processing of the applicable areas according to the present scenario. Chakrapani, a legend clinician took the authorship in the role of commentator of the Charak Samhita to explore the clinical orientation for that period, but the still worthy character of Chakrapani is still most prime for Ayurveda clinics as Charak Samhita as it is regarded as the best treatise of Ayurveda medical text.

The epitome of Chakrapani Dutta on Charak Samhita is a treasure of clinical entities which magnifies the theory in an applied aspect. The clinical terminologies in Charak Samhita has categorically been analysed in the purview of applied thoughts. The terminology which are being mentioned in Charak Samhita but not understood in a palatable form those are in the ambit of explanation which cultivate the knowledge in respect to clinical terminologies.

The unexplored and not understood subject written in Charak Samhita is well commented by the commentators for better onward transmission of knowledge and an intact state of proceedings of the clinical practice. Chakrapani Datta had classically magnified the encapsulated thought of Charak Samhita in such a way which has definitely a clinical entity. All the eight sthanas and its related chapters are related to Basic science, Philosophical thoughts, Physiology, Anatomy, Pathology and Clinical medicine, Pharmacology, Pharmaceutics, Medical ethics, Community medicine, Toxicology, Gynae & Obstetrics, Pediatrics, Surgery, Eye & ENT and General medicine. All the domain of medical sciences as mentioned in the compendium has been clarified in his commentary with the effective clinical practice and subsequently that has been specified in relevant context. For better clinical efficacy in the present scenario, regarding betterment of the Ayurveda practice in the purview of preventive and curative health, evaluation of Ayurveda Deepika is very essential which is not so much used rationally. For this purpose, present paper attempts to search the terminologies in the writings of Chakrapani Datta having clinical importance and to evaluate the clinical significance of searched documents.

## **MATERIALS AND METHODS**

Literature written by Chakrapani Datta was collected with special reference to Charak Samhita

in any form of publication. The vast literature of clinical terminologies in Charak Samhita, contributed by Chakrapani Datta has been attempted to analyse categorically. In this regard the all the commentary of Charak Samhita has been thoroughly reviewed in the library of National Research Institute of Ayurvedic Drug Development, Bharatpur Bhubaneswar has been collected and categorised according to the modern clinical chapters (Agnive a, 2000; Agnive a, 1991; Agnive a, 1922; Agnive a, 1991; Agnive a, 1997; Agnive a, 1996; Agnive a, 1976; Agnive a, 1949; Gupta, 1999; Shastri, 1954). An elaborative list has been prepared after that according to the modern clinical subjects the list of words has been categorised.

The qualitative terminologies have been arranged in respect to Anatomy, Physiology, Molecular Biology, Preventive and Social Medicine, Forensic medicine, Gynaecology / Obstetrics and Surgery. The categorical terminologies have been explained in the respective subject to justify the reflection of the Ayurvedic terminological treasure in the purview of modern science.

## **RESULTS AND DISCUSSION**

The whole Charaka Samhita is consisted of 8 Sthanas and 120 chapters. Those are sequenced as sutra, Nidana, vimana, sarira, indriya, cikitsa, kalpa and siddhi chronologically. In each sutra and chikitsa sthana is consisted of thirty chapters where as indriya, kalpa and siddhi sthana are having twelve chapters each and rest Vimana, Nidana and Shareera are distributed in eight chapters each. Each sthana and chapter has its own meaning. All Sthanas of Charaka Samhita are focussed to encompass and elaborate all the basic concepts, rules and literature on general medicine. The meaning of Sutra sthana is that which incorporate the basic thoughts of treatment in the sequenced form. The meaning of Nidan Sthana is implied thought the aetiology sign symptoms, pathogenesis of the diseases. Vimana sthana is directly related to bed side clinics and has a significant area of clinical medicine. Sharira sthana indicates the physiological and Anatomical arrangement conceptual of the body and the basic philosophy related to it. Indriya sthana is nothing but a categorical entity of prognostic values. Chikitsa sthana stands for the stage wise treatment of the basic diseases and subsequently the principle of treatment considering the aetiopathogenesis of the diseases. Kalpa sthana is related to pharmaceutical preparations in an easy effective way to neutralize the diseases with simplified modules.

Siddhi sthana is the specified sthana which signifies the measures to be taken to avoid the adversities arise due to Panchakarma therapy with the physician's potent knowledge to those adversities.

Primarily all the Sthanas and Adhayas between Charak samhita been profoundly well extent by Chakrapani Dutta to justifies the clinical entities. The sequence of the Adhayas are well versed by Chkrapani Dutta classifying the meaning of those chapters respectively and the Seven Chatuska in which every Chatuska are compiled of four chapters in Sutra sthana and the rest two of Sutra Sthana mentioned as "Sangraha adhyasa" are also being well extended by Chkrapani Dutta to understood Charak Samhita easily.

The theoretical knowledge of Chakrapani Datta has been categorically analyzed in respect to clinical prospective. These vary thoughts are so classified that the momentum of the specific characteristics of the words which are required to analyzed for better understanding of Charak Samhita. Those significant words were emphasized for clarification to make the module of different branches and its dimension in a streamline processed to have a scientific module. The classification reflects the traditional thought in that era which is still prevailed in terms of its clinical entity and scientific validation. The nutshell module in a paper has tried to glorifying the scientific development of traditional knowledge in respect to contemporary purview and the template has been cultivated right from Philosophy to Psychology with the other related contemporary branches to justify the atonable states of clinical practices of Charaka Samhita keeping the perfection of Chakrapani in this regard in an intact state.

The fundamental of Physiology are related Vayu, Pitta and Kapha. Anatomy related to Srota, Sira, Dhamani, Sharir sankaha Vyakarana, Srota Vimana etc. Molecular Biology related qualitative and interaction of Vayu, Pitta and Kapha. Preventive and Social Medicine related to Dinacharya, Rltucharya social activity and Janapath Bishansya Viman related to environmental pollution. Pharmacy related to Swarasadi Kalpana, Asava, Aristha etc. Pharmacology related to define drug and its action related to Rasa, Guna, Virya, Vipak and Prabhab and individual quality of each drug mentioned in Atreya Bhadrakapya Adhyay, Annapana Biddhi and Rasa Vimana etc. Forensic medicine is related to Visa chikitsha and different types of Vaidyas along with Nighraha Sthana specified for preventing the legal evidence in the court. Pathology related to Nidan Sthana and different pathogenesis sign symptom of different diseases mentioned in Nidan Sthana and chikitsha sthana. Clinically bed side examination related to Rog Vishagjitia Viman. Gynaecology and Obstetrics related to Jatisutria Sharira and Yonirog chikitsha. Paediatrics is related to Jatisutriya Sharira and Mahati Garbhabakranti Adhyayas. Shalya related to Brana Chikitsha, Ashmari, Udara and Gulma Chikitsha along with Kshara and Agni karma mentioned in respective chapter. Shalakya is related to Trimarmiya Sidhhi and Kayachikitsha related Therapeutic measures mentioned in Chikitsha and Siddhi sthana.

List of words collected from Charaka Samhita, contributed by Chakrapani Datta, having the clinical significance are stipulated in Tables 1 to 14.

**Table 1: List of words collected from Charak Samhita having the Philosophical Significance.**

<b>Clinically significant Words</b>	<b>The meaning according to Chakrapani Datta</b>	<b>Categorical Significance</b>
Adrsta	Invisible factor	Philosophy
Ayus	continuance of consciousness	Philosophy
Ananta	Liberation	Philosophy
Bhautika	Which is beneficial in demonic	Philosophy
Daiva	Past deeds	Philosophy
Dehi	Denotes physical purusa	Philosophy
Dravya	Basic Material	Philosophy
Matsyandika	That which is in the state of solidification on heating and is in the from of granules like fish eggs	Philosophy
Prana	which promotes vitality	Philosophy
Purusa	youthful	Philosophy
Prayatnadi	Even the very minute type of action originated from conscious will	Philosophy

**Table 2: List of words collected from Charak Samhita having the Grammatical Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Adhi	Sense of one that is read.	Grammatical
Adhyaya	That in which or by which some idea is acquired	Grammatical
Akraya	Price	Grammatical
Bhinnabhinna	General and specific	Grammatical
Bhramsa	Going down too far	Grammatical
Cikitsaprabhrta	A physician who carefully maintains to offer his medical help well to patients.	Grammatical
Dhavana	Moving to side	Grammatical
Dhmana	Filling up with carried materials rasa etc.	Grammatical
Esana	That by which something is searched or accomplished	Grammatical
Gurutva	Gravitational force	Grammatical
Indriyarthā	Sound, touch, vision, taste and smell	Grammatical
Jyoti	Body-heat	Grammatical
Kaurava	Cotton	Grammatical
Mrta	Carcass	Grammatical
Prabha	Lusture or brilliance	Grammatical
Sada	Quickly	Grammatical
Tantrana	Supporting the body, Protection of Ayurveda	Grammatical
Udarditva	Affection in upper part of the body	Grammatical
Vaisesika	Specific	Grammatical
Yoga	achievement of body in respect of strength, complexion etc.	Grammatical

**Table 3: List of words collected from Charak Samhita having the Dietetics Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Ajirnasana	Eating of uncooked meal	Dietetics
Aruci	Food can not be taken	Dietetics
Asradha	Lack of desire for food	Dietetics
Anutarsa	drink used to quench thirst	Dietetics
Balya	Produces strength eventually	Dietetics
Kana	Broke pieces of rice	Dietetics
One diet	diet not in the afternoon (But in the forenoon)	Dietetics
Pramitasana	Delayed meals	Dietetics
Pupalika	Cooked sweet balls made of fine flour	Dietetics
Pramitasana	constant use of single rasa	Dietetics
Pramitasana	eating lately after prescribed time	Dietetics
Sadava	That made of sweet and sour substances.	Dietetics
Virodha	Vitiation	Dietetics

**Table 4: List of words collected from Charak Samhita having the Physiology Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Anujyoti	Deficient body-heat	Physiology
Anulomana	Carminative	Physiology
Bala	power interable from exercise	Physiology
Chestita	Biological response, Action	Physiology
Dosa' and 'krama'	Condition of dosa'	Physiology
Harsa	Emotion leading to determination	Physiology
Ojas' here as 'rasa'	The essence of body'	Physiology
Pittin	That of paitika constitution	Physiology
Sara	Relatively pure dhatu	Physiology
Rasadi	not only physical but mental faculties such as memory etc	Physiology
Tejas	Body-heat or semen	Physiology
Upacaya	Development of body	Physiology

**Table 5: List of words collected from Charak Samhita having the Anatomical Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Basti	Receptacle or urine	Anatomy
Gudasotha	Piles	Anatomy
Kloma	Seat of thirst	Anatomy
Pindika	The mass of muscles between knee and shank	Anatomy
Pindika	Musculature in the middle of leg below knee	Anatomy
Purisadhana	Receptacle of faces	Anatomy
Urna	Hairs of linseed	Anatomy
Vapavahana	Seat of fat	Anatomy
Marma	Hridaya	Anatomy
Mastulunga	Mastiska	Anatomy
Parsvatah	Grahani and guda are situated in that side	Anatomy
Rasayani	srotas	Anatomy
Trimarma	Three important vital organs-sira (brain), basti (kidney) and hridaya (Heart)	Anatomy

**Table 6: List of words collected from Charak Samhita having the Preventive & Social Medicine (PSM) Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Adhyasana	Eating when the previous meal is not digested	PSM
Acarana	Non-observance of washing	PSM
Bala-kala	Time of aggravation or manifestation of fever	PSM
Yogaksemakara	Promotive and preventive measure	PSM

**Table 7: List of words collected from Charak Samhita having the Psychology Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Buddhi	Prajna	Psychology
Manas	Mind	Psychology
Sattva	Mind	Psychology

**Table 8: List of words collected from Charak Samhita having the Pathology Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Ajirnadhyasana	Overating during indigestion	Pathology
Chaya	Reoated to bhutas	Pathology
Daha	The whole body is burning	Pathology
Glani	Emaciation or malaise	Pathology
Hetu	Laksana	Pathology
Kosthavata	Wind in bowels	Pathology
Madhumeha	As well as generally all the pramehas	Pathology
Osa	Distress as if by side fire	Pathology
Plosa	Slight burning	Pathology
Sipayante	Excessive flow of sweat from the body, Lethargy	Pathology
Tara' and 'tama'	Applied to samsarga as well as sannipata according to the condition of dosa	Pathology
Varna	Complexion	Pathology

**Table 9: List of words collected from Charak Samhita having the Medicine Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Aviruddhavirya	That having no antagonistic items in respect of virya	Medicine
Balajala	Cold water prepared with bala	Medicine
Cikitsita	Chapter dealing with therapy	Medicine
Dadimasara	Juice of dadima	Medicine
Gandhataila	Sesamum oil kept in contact with fragrant substances	Medicine
Jiivaniya	Promoting life-span	Medicine
Ksara	Yavaksara	Medicine
Nityam	Vajikarana is to be used not occasionally like rasayana but always like food	Medicine
Phaladi	Seven types of sirovirecana	Medicine
Rasayana	Attaining excellent rasas	Medicine
Yukti	Planning of therapy with due consideration of body morbidity	Medicine

**Table 10: List of words collected from Charak Samhita having the Sexology Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Aharsana	Incapability in sexual act	Sexology
Abhyasana	frequent sexual intercourse	Sexology
Anvicchet	Achievements of vajikarana	Sexology
Apatyasantanakara	That which produces lineage of progeny such as sons, grandsons	Sexology
Atmaja	Sukra	Sexology
Klaibya	Non-erection of penis	Sexology
Vrsayate	This semen gets nourished and inclined to move out	Sexology
Yogyam	Capable of being used as aphrodisiac	Sexology

**Table 11: List of words collected from Charak Samhita having the Gynaecology & Obstetrics Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Akala yonigamana	Going to women with out sex urge an in improper track.	Gynaecology & Obstetrics
Artava	Ovum	Gynaecology & Obstetrics
Garbhadharini	Placenta	Gynaecology & Obstetrics
Praja	Both male and female progeny	Gynaecology & Obstetrics

**Table 12: List of words collected from Charak Samhita having the Genetics Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Ksetra	The seed of semen sprouts there	Genetics
Kulaja	Hereditary	Genetics
Upataptabija	Affected genes producing seed	Genetics

**Table 13: List of words collected from Charak Samhita having the ENT Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Salakya	Operating on the different layers (of eye)	Ear, Nose, Throat

**Table 14: List of words collected from Charak Samhita having the Toxicology Significance.**

Clinically Significant Words	The meaning according to Chakrapani Datta	Categorical Significance
Agada	Freedom from defects caused by winds, fire etc	Toxicology
Dusivisa	poison usually gara may be animal or vegetable origin	Toxicology
Gara	Latent poison	Toxicology
Hema	Unprocessed Gold	Toxicology
Hiranya	Processed gold	Toxicology
Prativisa	use of another poison (which acts as antidote)	Toxicology
Upadhana	Application of some drug on head for drawing out the poison	Toxicology
Vairodhika	Toxicity caused by incompatibility	Toxicology
Visa	It caused depressive affliction	Toxicology

### CONCLUSION

Present report is a petite attempt to investigate the unexplored thoughts of Chakrapani Datta in the consequence of specialty wise study in parlance to Modern Medical Science. The paper illustrated the terminologies in the writings of Chakrapani Datta having clinical importance and highlighted the clinical contribution of Chakrapani Datta with special reference to Charak Samhita. Further studies are warranted to reassess the results and to explore the concept in those aspects which remained untouched.

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