

## AN OUTLINE OF COMMUNICABLE AND INFECTIOUS DISEASES IN CHARAK SAMHITA

Deepali Jayesh Agrawal<sup>1</sup>, B. D. Swami<sup>2</sup>

<sup>1</sup>MD (Ayurved), Assistant Professor in Dept. of Rognidan & Vikruti Vigyan,

<sup>2</sup>Assistant Professor, Dept. of Samhita Siddanta;

SSVP Ayurvedic Collage & Research Centre, Hatta, Tq-Basmat, Dist-Hingoli, Maharashtra, India

Email: [drjayeshagrwal@gmail.com](mailto:drjayeshagrwal@gmail.com)

### ABSTRACT

The diseases can be categorized into two domains namely, communicable and non-communicable diseases. While all communicable diseases are infectious, not all infections are communicable. The pathology branch of contemporary medicine is largely based on this categorization. It has been a common conception that Ayurveda doesn't endorse germ theory of diseases at all. This is not a complete truth as the great treatises of Ayurveda have touched upon the concept of *Agantuja Vyadhi*. The term *Agantuja* is implied in broad spectrum under which external trauma and organisms such as parasites, viruses, bacteria, fungi all are been incorporated. In the present paper, an effort has been made to compile and review these aspects from *Charak Samhita*. It has clearly attributed pathophysiology of diseases to intrinsic factors such as *Dosha*, *Dhatu*, *Agni* and *Srotas*. Still, in certain places, references of involvement of extrinsic factors can be seen.

**Keywords:** Communicable diseases, Infectious diseases, *Charaka Samhita*, *Agantu Vyadhi*

### INTRODUCTION

The diseases can be categorized into two domains namely, communicable and non-communicable diseases. A communicable disease is an illness due to a specific infectious (biological) agent or its toxic products capable of being directly or indirectly transmitted from man to man, from animal to man, from animal to animal, or from the environment (through air, water, food, etc.) to man.<sup>1</sup> An infectious disease is a disease caused by a micro-organism and therefore potentially infinitely transferable to new individuals. While all communicable diseases are infectious, not all infections are communicable. Tetanus, for example, can

cause an infection, but a person with tetanus can't spread it to other people. A communicable disease on the other hand is an infectious disease that is contagious and which can be transmitted from one source to another by infectious bacteria or viral organisms.

The pathology branch of contemporary medicine is largely based on this categorization. The antibiotics were considered to be super medicine as they had potential to curb the ever-increasing realm of communicable and infectious diseases. The last few decades though, have witnessed advent of drug resistant organisms or superbugs. Thus, the medical science world-

wide has a rekindled hope towards health systems such as Ayurveda to provide with new medicines.<sup>2</sup> In light of this, many research studies, including laboratory and clinical studies, are being carried out to validate and mark efficacy of time tested Ayurvedic drugs pertaining to different communicable and infectious diseases. It has been a common conception that Ayurveda doesn't endorse germ theory of diseases at all. This is not a complete truth as the great treatises of Ayurveda have touched upon the concept of *Agantuja Vyadhi*. The term *Agantuja* is implied in broad spectrum under which external trauma and organisms such as parasite, viruses, bacteria, fungi all are been incorporated. Thus, the participation of organisms in pathophysiology of some diseases is acknowledged. In the present paper, an effort has been made to compile and review these aspects from *Charak Samhita*.

### Conceptual Study-

The oldest and most revered treatise of Ayurveda, *Charak Samhita*, has clearly attributed pathophysiology of diseases to intrinsic factors such as *Dosha*, *Dhatu*, *Agni* and *Srotas*. Still, in certain places, references of involvement of extrinsic factors can be seen. In the *Ashtodariya* chapter, it has been mentioned that, all the endogenous diseases (*Nija Vyadhi*) occur invariably due to the vitiation of *Vata*, *Pitta* and *Kapha*.<sup>3</sup> *Acharya Charaka* explains that, as a bird cannot infringe upon its own shadow even by flying throughout the day, in the same way all the diseases are produced by disturbances in equilibrium in *Dhatu* and cannot occur without vitiation of *Vata*, *Pitta* and *Kapha*. Further it adds that, exogenous diseases are exception to this as they can be produced without involvement of *Dosha*.<sup>4</sup> According to *Charaka*, exogenous diseases may occur as secondary development after endogenous and similarly endogenous diseases may further progress as exogenous diseases. Thus, one should carefully analyze primary causes and secondary complications before starting treatment.<sup>5</sup> In the same chapter, twenty types of *Krimi* are elaborated which cause diseases.<sup>6</sup> *Krimi* are first classified into *Bahya*, *Raktaja*, *Shleshmaja* and *Purishaja* and then among these four groups twenty types of *Krimi*

have been mentioned. *Bahya Krimi* includes *Yuka* (lice) and *Pipilika* (eggs of lice) that dwell on the body surface and are produced from external impurities. There are six *Krimi* that inhabit in blood (*Raktaja*) viz. *Keshada*, *Lomada*, *Lomadwipa*, *Saurasa*, *Audumbara* and *Jantumatarata*. Seven *Krimi* live in *Kapha*-specific body locations (*Shleshmaja*) viz., *Antrada*, *Udaraveshta*, *Hridayada*, *Churu*, *Darbhapushpa*, *Saugandhika* and *Mahaguda* and five *Krimi* originate from faeces (*Purishaja*) viz. *Kakeruka*, *Makeruka*, *Leliha*, *Sashulaka* and *Sausurada*. These are extensively discussed along with treatment in *Vyadhita Rupiya Vimana Adhyaya* of *Vimana Sthana*.<sup>7</sup>

In the *Jwara Nidana* chapter of *Nidana Sthana*, *Agantuj Jwara* has been elaborated.<sup>8</sup> It is stated that, it is caused by *Abhighata* (trauma), *Abhishanga*, *Kama* etc, *Abhichara* (association with evil) and *Abhishapa* (wrath of the wise and the elders). In the *Chakrapani* commentary, he states that, apart from these, *Bhutabhishanga* (Contact with invisible organisms) can also be included in causes.<sup>9</sup> This clearly indicates inclusion of infectious pathogens in pathophysiology of *Agantu Jwara*. The viewpoint of *Chakrapani* is in tune with *Acharya Charaka's* elaboration of treatment of *Agantu Jwara* in *Jwara Chikitsa Adhyaya*.<sup>10</sup> Also, in the same chapter, association of *Tritiyaka* and *Chaturthaka* type of *Vishama Jwara* with *Agantu* or extraneous factors such as *Bhuta* (evil spirits including germs) has been denoted.<sup>11</sup> *Charaka* commands that usual protocol of treatment for *Jwara* should be abandoned here as special case. *Daivavyapashraya Chikitsa* has been indicated in treatment of *Abhicharaja* and *Abishangaja Jwara*.

Unclean (*Ashuchi*) food has been enlisted as a causative factor for formation of *Ama* in *Trividha Kukshiya Vimana Adhyaya*.<sup>12</sup> Along with other causative factors it can give rise to diseases such as *Visuchika* (choleric diarrhea), *Alasaka* (intestinal torper), *Ajirna* (indigestion) and *Amadosha* (vitiation of undigested food).

It is to be noted that diseases like *Kushtha*, *Visarpa*, *Rajayakshma* etc, which are comparable to notable communicable diseases like leprosy & other skin dis-

eases, cellulitis, tuberculosis respectively have not been identified to have any causative extrinsic factor. Probably, the answer to this enigma lies in concept of *Vyadhikshamatva* put forward by *Charaka* in *Vividhashitapeetiya Adhyaya* of *Sutrasthana*.<sup>13</sup> It is stated that, all the bodies are not capable of preventing disease. Individuals, who are excessively obese, emaciated, whose muscles, blood, bones are depleted, who are very weak physically, who are habituated to consuming unwholesome food, who take in inadequate quantities of food, and who have very weak mind cannot withstand diseases. This concept has been further elaborated in *Chakrapani* commentary. It says that *Vyadhikshmatva* or resistance to diseases is of two types- one which obliterates the disease progress and another one which doesn't let the disease to evolve in first place.<sup>14</sup> This description well suits the concept of acquired immunity as well as innate immunity. It is also seen that not all persons infected with pathogens manifest the signs and symptoms of disease. In such cases, the pathogens are either destroyed by immune system or remain constrained like latent tuberculosis.

As it narrates individualistic approach towards diseases, *Charak Samhita* also refers to epidemics in *Janapadodwansaniya Vimana Adhyaya*.<sup>15</sup> Epidemics have potential to bring destruction of all people, no matter how different they are from one another. Since, individual differences have no impact on air, water, land and season, which are common factor to every living being. These four factors can be attributed to modes of spread of **infection described** in modern science. Imprudent conduct and unjust actions are said to be root cause of this devastation. It can be derived that immunity gets lowered due to these and body is prone to various infections. The details suggest epidemics by communicable diseases though not clearly mentioned so. *Panchakarma*, *Rasayana Chikitsa* and *Sadvritta* or good conduct are included in the treatment regime of such diseases.<sup>16</sup>

## DISCUSSION

As it has already been explained, all communicable diseases are infectious, not all infections are communicable.

According to Ayurveda, there are basically two types of diseases namely, *Nija* (Endogenous) and *Agantuja* (Exogenous) diseases.<sup>17</sup>

Ayurveda refers that the *Doshas* get aggravated by exogenous or endogenous causes, which further spread in body by the using improper foods and activities. It vitiates *Kosthagni* (Metabolic enzymes) which leads to improper digestion production of *Ama* (toxin) and their minute *Srotas* (body channels) this is called *Srotodushti* (Disequilibrium in channels). When the *Rasadhatu* (plasma and lymph) containing *Ama* (toxin) and aggravated *Doshas*, reaches the place where *Kha-Vaigunya* (movement tendency towards empty space) has taken place, it being unable to get into the minute channels, gets obstructed, stagnates/accumulates there and gives rise to such diseases caused by exogenous causes. If the "Exogenous – diseases" get ignored then it may turn into *Nija Vyadhi* "Endogenous chronic disease" and affects the immune system. Diminution of natural immunity makes the person susceptible to all infections. Therefore, Ayurveda advocates enhancing the immunity against the diseases.

Different examples of infectious diseases and communicable diseases are found in *Charak Samhita*. *Charaka Samhita* while describing the *Vishama Jwara*, describes that depending on localization and involvement of *Dhatu*s (Body Tissues) fever (temperature) rises after a particular interval only. Moreover, it is advocated that body's immunity system is of more importance than the infective organisms. It is mentioned that *Bija* (seeds) soaked in *Bhoomi* (land) flourishes only in correct time (atmosphere), and *Doshas* vitiates (micro-organism ought to vitiate *Doshas*) *Dhatu*s if *Dhatu*s *Bala* (immunity) depleted and in correct time.

The description of various *Krimi* as per their residing places in body is elaborative. These can be correlated to worm infestations, parasites as well as vectors for different diseases. A detailed observation reveals a

great deal of similarity between diseases caused due to aforementioned types of organisms and *Krimi*.

*Charaka Samhita* describes in detail – the concept of *Vikaravighatabhavabhava* in *Prameha Nidana* - the role of amalgamation of causative factors, *Doshas* and *Dushyas* in occurrence and nonoccurrence of disease. If these factors amalgamate by massive exposure or indulgence of etiological factors (massive microbial load), during very short period and depleted strength of *Dhatus* leads to occurrence of disease with gigantic presentation of disease and symptom. If the case occurs disease even if produced will be with mild to mildest form only or mere induce an immune response in body thus no disease occurs.<sup>18</sup>

Along with this, description of epidemical diseases as *Janapadodhwansa*, elaborates the factual inevitability to count destruction potential of them. Thus, necessity to tackle them was also established.

## CONCLUSION

Thus, it can be summarized that, Ayurveda, especially *Charaka Samhita* doesn't disallow the role of extrinsic factors in pathophysiology of diseases. It asserts importance of maintaining equilibrium of *Dosha* for health. Still, due diligence has been given towards other external causative factors wherever necessary. The line of difference between communicable diseases and infectious diseases can be well perceived in description of such kind of diseases in *Charaka Samhita*. As, *Charak Samhita* has primary aim of disease prevention, it proposes concepts of *Vyadhikshamatva* and *Janapadodhwansa* to gain knowledge and prevent such diseases.

## REFERENCES

1. Edemekong PF, Huang B. Epidemiology of Prevention of Communicable Diseases. [Updated 2019 Aug 10]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2019 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK470303/>
2. Patwardhan B, Payyappalli U. Ayurveda and antimicrobial resistance. *J Ayurveda Integr Med.* 2018;9(2):85–86. doi:10.1016/j.jaim.2018.05.002
3. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Sutra sthana chapter 19, verse no.5, page no.111 .
4. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Sutra sthana chapter 19, verse no.6, page no.111 .
5. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Sutra sthana chapter 19, verse no.7, page no.112.
6. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Sutra sthana chapter 19, verse no.4, page no.110.
7. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Vimanasthana chapter 7, verse no.9-13, page no. 258 .
8. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Nidanasthana chapter 1, verse no.30, page no. 592.
9. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Nidanasthana chapter 1, verse no.30, page no. 592–Chakrapani Tika
10. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Chikitsasthana chapter 3, verse no.111, page no. 407.
11. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakrarapanidatta, edited by Dr. Brahmanand

Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Chikitsasthana chapter 3, verse no.292, page no. 425.

12. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Vimanasthana chapter 2, verse no.10-11, page no. 239.
  13. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Sutra sthana chapter 28, verse no.7, page no. 178.
  14. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Sutra sthana chapter 28, verse no.7, page no. 178 Chakrapani commentary
  15. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Vimana sthana chapter 3, verse no.6, page no. 241.
  16. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Dr. Brahmanand Tripathi, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Vimana sthana chapter 3, verse no.13-18, page no. 241.
  17. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Vaidya Jadavaji Trikamji Acharya, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2011, Vimanasthana chapter 6, verse no.3, page no. 252.
  18. Agnivesha, Charaka Samhita elaborated by Charaka & Drudhabala with Ayurveda-Deepika Commentary by Chakraranidatta, edited by Vaidya Jadavaji Trikamji Acharya, Varanasi, Choukhambha Surbharati Prakashan, Reprinted 2005, Nidanasthana chapter 4, verse no.4, page no. 212.
- 

**Source of Support: Nil**

**Conflict Of Interest: None Declared**

How to cite this URL: Deepali Jayesh Agrawal & B. D. Swami: An Outline Of Communicable And Infectious Diseases In Charak Samhita. International Ayurvedic Medical Journal {online} 2019 {cited October, 2019} Available from: [http://www.iamj.in/posts/images/upload/1884\\_1888.pdf](http://www.iamj.in/posts/images/upload/1884_1888.pdf)