



### Conceptual study of the *Anukta Vyadhi* w. s. r. to *Covid-19* Disease.

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#### Abstract -

Covid -19 or Novel Corona virus is a disease originally distinguished in China at the end of 2019, has caused an enormous worldwide flare-up and a significant general medical problem. Henceforth, WHO has pronounced Corona virus as the sixth public health emergency of global concern. To forestall the spread of this infection all nations had powerfully placed lockdown. Since no vaccine has been affirmed till now the triads of early evaluating, isolating, and treating the patients were trailed by different medical services places. It is more predominant among the old-aged related to comorbidities and in immunosuppressed. Since this condition is related to numerous complications on many systems, clinical features ranging from asymptomatic to SARS, pneumonia to death of an individual, it has become a need to study this illness fundamentally. Corona virus is a new

disease entity for the Ayurveda which comes under *Janapadodhwanasa* (worldwide epidemic), *Upasargika vyadhi* (communicable diseases), and *Anukta vyadhi*. The term *Anukta* is used in the sense of unuttered, unsaid, and unheard. The Concept of *Anukta* is one such time-tested principle that is useful to understand the new disease, drug, and formulations. Covid19 isn't mentioned in traditional writings of Ayurveda yet with the guideline of *Anukta vyadhi* the pathogenesis, the management and prevention of the illness can be perceived.

**Keywords:** *Anukta vyadhi*, covid-19, *janapadodhwanasa*, *pittolbana vatakapha jwara*.

#### Introduction -

Covid19 the new disease and virus were unknown before the outbreak began in

Wuhan, China, in December 2019. Corona viruses (CoV) are a large family of viruses that cause illnesses ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Covid19 spreads quickly worldwide due to its high human-to-human transmission. Medical sciences took more interest in the use of alternatives science in the prevention and control of the disease and building up resistance and immunity against viruses.

*Acharyas* had a vision of forthcoming new diseases; consequently, they clarified the idea of understanding the new illnesses utilizing *Anukta Vyadhi*. The standards of *Ayurveda* are everlasting yet its applications can be adjusted according to the ideal changes in the public arena. As the disease is not mentioned in *Ayurveda* classics, the principle of *Anukta vyadhi* is taken into consideration. *Anukta* literally means unsaid and unuttered. The concept of *anukta* is stated in the context of *tantrayukti*. ie. *Atidesha tantrayukti* is attributed to understanding the concept and technology of *anukta*. In the context where nothing is clearly said; *Anukta* is taken as a standard parameter. It helps in understanding the classical concepts as well as gets a base for understanding the new infections, medications and treatment standards, etc.

It is important to evaluate the nature of the disease and the *Doshas* involved before prescribing medicines for prevention and management. Here, an attempt is made to comprehend the covid19 disease with the standards of *Ayurveda* based on *anukatva* in

*vyadhi*, *Lakshana* and treatment the pathogenesis of this new illness is framed.

### **Materials and methods -**

Conceptual references are taken from all the modern medical textbooks, *Ayurveda Samhitas* and related websites. After studying the related concepts, an effort has been made for a conclusion that is based on review, observation and discussion.

### **Observation and Discussion -**

#### **Modern aspects of covid19 -**

COVID -19 is an illness caused due to novel Corona virus 2, now called Severe Acute Respiratory Syndrome Corona virus-2 (SARS-CoV-2). The cause of COVID-19 is a beta Corona virus in the same subgenus as the severe acute respiratory syndrome (SARS) virus (as well as several bat Corona viruses) but in a different clade. The structure of the receptor-binding gene region is fundamentally the same as that of the SARS Corona virus, and the virus has been appeared to use the same receptor, the angiotensin-converting enzyme 2 (ACE2), for cell entry.

**Mode of Transmission:** The disease can spread from person to person through small droplets from the nose or mouth which are spread when an individual with COVID-19 coughs or exhales. These droplets land on objects and surfaces around the individual. Others at that point get Corona virus by contacting these articles or surfaces, then touching their eyes, nose, or mouth.

**Incubation Period:** The incubation period for COVID-19 is thought to be within 14

days following exposure, with most cases occurring approximately four to five days after exposure.

**Pathogenesis of Covid-19:** The primary target of the virus is lung epithelial cells. The virus enters the host cells and the binding process between the receptor-binding domain of virus spikes and the angiotensin-converting enzyme 2(ACE2) receptor takes place. In this infection, individuals have leukocyte numbers (TLC increased) initially and then lower counts, abnormal respiratory findings, increased levels of plasma pro-inflammatory cytokines and chemokines.

**Clinical Manifestation:** Pneumonia appears to be the most frequent serious manifestation of infection, characterized primarily by fever, cough, dyspnea, and bilateral infiltrates on chest imaging.

The most widely recognized clinical features at the beginning of ailment are -Fever, Fatigue, Dry cough, Anorexia, Myalgias, Dyspnea, Sputum, diarrhea, vomiting, loss of taste, and smell.

**The spectrum of Illness Severity:** The spectrum of symptomatic infection ranges from mild to critical; most infections are not severe.

1. Mild (no or mild pneumonia)
2. Severe disease (with dyspnea, hypoxia, or >50 percent lung involvement on imaging within 24 to 48 hours)
3. Critical disease (with respiratory failure, shock, or multiorgan dysfunction)

The overall case-fatality rate was 2.3 percent.

Clinical diagnosis of COVID-19 is mainly based on epidemiological history, clinical manifestation and some auxiliary examinations such as nucleic acid detection, x-ray, CT Scan, immune identification technology, enzyme-linked immunosorbent assay (ELISA), and blood culture. Real-time quantitative polymerase chain reaction (RT-qPCR) is the most common, effective, and straightforward method for detecting a pathogenic virus in the respiratory secretions and blood.

**Vyadhikshamatva (Immunity according to Ayurveda):**

Our activities like eating on odd occasions, passionate eating, eating incorrectly food blends, working late hours into the evening, sleeping late, and weak emotional capabilities leading to expressions of Anger, Continuous exposure to stressful situations, Hate, Fear, Lust, Greed, etc. (collectively called as '*Adharmacharana*') debilitate the body's immune system. *Ojas* helps in energizing cells of our body, maintains healthy cellular intelligence and keeps our whole being in good shape, physically, mentally, emotionally and spiritually. *Ojas* is formed as a result of the well digested and assimilated food in a well-maintained metabolic heat in the body. Along with the formation of the *Rasa dhatu* (nutrition derived from the assimilated food that helps in forming healthy Plasma to form blood). *Ojas* helps in maintaining a healthy balance of energies in the body and also builds up *Vyadhikshamatva* (immunity). By indulging in unhealthy activities of both *sharir* (body)

and *mana*(mind), both *Ojas* and the *Rasa dhatu* get depleted as they are in short supply. The net outcome is the body succumbing to ailments.

### **Janapadodhwansa-Roga (Worldwide Epidemic/Pandemic):**

*Chakrapani*, one of the critics of *Acharya Charaka*, describes the causation of disease and epidemic. He says that although individuals differ in physical constitution, food habits, suitability, strength, immunity, age, etc. they do get affected with disease owing to vitiation of some factors that are common to all those who inhabit that community. These factors lead to the simultaneous manifestation of disease having the same set of symptoms among all the inhabitants leading to widespread manifestation in the community. The factors that are common to all the individuals in a community include rapid and violent vitiation of *Vayu* (air), *Udaka* (water), *Desha* (habitat), and *Kaala* (season).

*Aniyata Hetu* is the evitable disastrous factors that include *Pradnyaparadha*, *adharma*, *Abhishyangaja* (effects of pathogens, evil forces, and unhygienic condition), and *Abhishapaja* (curse). COVID-19 has evolved itself into a pandemic, affecting a large population all over the world irrespective of their physical features, dietary patterns, psychological attributes, etc. Other than influencing the people, these elements likewise influence the whole community bringing about inescapable infection causation known as *Janapadodhwansa Rogas*.

### **Upasargika Roga (Communicable Diseases):**

*Acharya Sushruta*, has depicted different modes of communicable disease transmission in his classical treatise *Sushrut Samhita*. He says by physical contact (*Gasrasansparshat*), expired air (*Nishwasat*), eating with others on the same plate (*Saha bhojanat*), sharing a bed (*Sahashayyashanashchapi*), using clothes, garlands, and paste (*Vastramalyanulepanat*) infectious diseases spread from person to person. Besides, he has also given examples of some diseases that spread through all these modes, such as different types of skin diseases (*Kushtha*), pyrexia (*jwara*), pulmonary tuberculosis (PTB) (*Shosha*), and conjunctivitis (*Netrabhishyanda*), etc. In Covid19 disease, the mode of transmission can be compared with the above reference of *Acharya Sushruta*.

### **Concept of Anukta Vyadhi (Un described Diseases):-**

*Anukta* in a real sense signifies 'unsaid and unuttered'. *Acharyas* had a vision of approaching new illnesses; consequently, they clarified the idea of understanding the new infections with *Anukta Vyaadhi*. *Anukta Vyaadhis* are the illnesses that are neither expounded or nor portrayed in writings of *Ayurveda*. To comprehend the idea of *anukta vyadhi*, it is essential to consider the ideas of *Ayurveda* viz, *dosha dhatu mala vijnana*, *agni*, *strotas*, *Ojas*, and *manas*. Understanding the *rasapanchaka* of *ahaara dravyas* is additionally useful to know its consequences for the above variables which are answerable for the appearance of illness.

Acharyas have commented that a Vaidya need not be ashamed when he is unable to name the disease, in fact, it is not necessary to know the exact nomenclature as that is not always possible. But it does not mean that one cannot diagnose such a condition. Some directions given in the texts like "*Apratyaksham Hi analpam*" (the non-visibility is very vast) "*Na Shakyam vistarena api vaktum*" (everything is not possible to deal at all time) "*Anyadapi kinchid syad Anukta iha poojita*" (the code and conducts of health Explained in other science which is conducive or Beneficial can be considered and Adopted) "*dishaanayasheshamapi*", these above version Indicates that there is a need of understanding and Incorporation of the unsaid *hetu, linga, and aushadhi*.

Chakrapani comments that *atidesha tantrayukti* (getting the knowledge of unsaid things) helps for clarification of the hidden meaning and also derives the unsaid things. This *Tantrayukti* is to understand the extension of existing technology and concept.

The general guidelines to understand the concept of *anukta* based on *Trisutras* viz *hetu, Lakshana* and *aushadhi*. The understanding, analyzing, and applying of *Trisutras*, *Atidesh Tantrayukti* and scriptural testimony, inference and reasoning knowledge of the new disease, new drug and formulation are ascertained.

#### A. Based on the causative factors *Hetu* (etiological factors):-

1. *Ayurveda* considers Corona virus as a *Janapadodhwansa vikara*.

*Pradnyaparadhajanya viharas* and *Adharma karma* i.e., ignorance of respiratory etiquettes is the main *hetu* responsible for this.

2. On the other hands due to *Adharmacharana, vyadhikshamatva* (immunity) becomes weak. People with weak immunity are more prone to this disease
3. According to *Acharya Charaka*, the factors responsible for an imbalance in the state of basic trinity *Doshas, Dhatus, and Malas* should be considered under this heading.
4. It can be grouped under the '*Agantuja vikaara*' with special reference to the class of '*Bhutabhishangaja*' (microbiological etiology) which are commonly affected by '*Bhutasanga*' (entry of SARs-CoV-2 through its droplets) and vitiates *tridoshas* in the body.
5. The predisposing factors such as old age and co-morbidities are causes of deteriorated *rogibala* and which resulted in instability of *Ojas* and fatality.

#### B. Based on the group of *Lakshana*:

The symptoms of increase and decrease of the *Doshas* which have been described separately should be anticipated in other cases also. The symptoms manifest as a result of the increase and decrease of *Dosha*. Their combination with *rasa, rakta*, and others (*dhatu and malas*) both in their normal and abnormal conditions and in a greater and lesser degree, will be endless (innumerable) and can be understood only with a mind intellect on it.



The main symptoms of COVID-19 are as follows -

Sign and Symptoms of Covid-19	According to Ayurveda
Fever	<i>jwara</i>
Dry cough	<i>vataja Kasa</i>
Fatigue	<i>daurbalya</i>
Myalgia	<i>shoola, angamarda</i>
Sore throat	<i>kanthodhwansa</i>
Difficulty in breathing	<i>shwaasa</i>
Sputum production	<i>kaphaja Kasa</i>
Anorexia	<i>aruchi</i>
Diarrhea	<i>atisara</i>

### C. Based on the basic concepts of *Vikriti Vigyana* i.e.

- Dosha Vriddhi, Kshaya, and Dushti Lakshana*
- Dhatu Vriddhi, Kshaya, and Dushti Lakshana*
- Mala Vriddhi, Kshaya, and Dushti Lakshana*
- Srotas Dushti Lakshana, Dushti Prakara*
- Agni, Agni Dushti Lakshana, Aama Lakshana*

The logic behind this is that the pathogenesis should involve the basic *Samprapti* factors like *Dosha, Dhatu, Mala, Agni, Srotas*; without the involvement of these, the disease cannot get manifested and hence the thorough knowledge of these basic factors helps to understand the pathology involved and accordingly the treatment can be planned.

### *Samprapti ghataka* of Covid-19:

*Hetu –Pradnyapradha, Adharma, agantujahetu, abhishanga, decreased rogibala*



Vitiation of *tridoshas* (*Pittolbana Kapha Vata*)



*Adhishthana* - in *pranavaha* and *rasavaha strotasa* evolve as the denominator for the transaction of SARS- CoV-2. The proper *adhishthana* can be suspected as *Koshta* itself, but the manifestation happens in *Uras*, which itself is a predominant site of *Kapha*



*Pitta dosha* exerts a significant pathological influence on *Kapha*. The *ushna guna* of *pitta*, in combination with the *Sa-sneha* and *drava guna*, will exert a pathological effect on *Kapha*, thereby making it *asthira* (unstable) and *abadha* (unbounded).



The coexisting *pitta*, even if very mild, will be causing *syandana* and *shoshana* in the chest progressively, which cannot be resisted by the body due to the already compromised *rogibala*.



*Vayu* gets *pratilomagati* along with *jatharagni* and *dhatvagni*-*mandya*. *Rasvaha, raktavaha, pranavaha, and swedovaha strotasa* are vitiated. The *dhaatupaaka*, a

dysregulated host response, from the context of *sannipaata jwara* comes



This results in the rapid instability of *Ojas* (immunity) leading to sepsis and eventually septic shock. It affects the *rasa, rakta, mansa, swedavahastrotas, ojakshaya* and develops symptoms such as *jwara, kaasa, shwaasa, angamarda* which resembles the symptoms of covid-19.

**Upadrava:** *Upadrava* are complications that manifest as a result of improper treatment of a disease, they may be mild or severe or an independent disease itself.

**Vridhhi, Sthana, Kshaya:** This implies the aggravating, static and relieving factors of disease. In short, it implies *Upashya* and *Anupashya*. The factors which result in depletion of Dhatus and deterioration of Bala (Immunity) will enhance the disease progression.

**Sadhyasadhya** - COVID-19 is a *kashtasadhya vyadhi* (to be treated with difficulty).

**Namanam:** In *Samhitas*, our ancient *Acharyas* named the diseases according to its *Pratyatmalinga (Rupa)*, involving *Dosha* and *Dushyas (Samprapti Ghatakas)*, *Adhisthana* of the disease.

**Anukta in the context of Chikitsa Siddhanta**

As a disease cannot occur without the involvement of *doshas*, hence even if the disease is not specifically mentioned, the intelligent clinician should treat the disease

as manifested by the signs and symptoms of vitiated *doshas*. Due to many combinations of *doshas*, treatment becomes mixed up; however, they will not exceed the six *upakramas* just as *vatadi doshas*. Thus, such diseases that are not mentioned in the text are innumerable. The features of the *doshas* are seen manifesting all over the body without any exception. So, their (*doshas*) functions and methods of treatment are all the same. Hence, the management of Covid19 disease can be done as follows-

1. *Jwara Shamana, Kapha Shamana, Vata Anulomana* and protection of *Rogibala*, ayurvedic immunity-boosting measures i.e., *Rasayana*.
2. Regulation of the status of *pitta*, especially its *drava* and *ushna gunas*. Particularly important in geriatric and those with co-morbidities, as this is the junction in which the fatal pathological processes start.
3. Bronchodilators and expectorants.
4. *Aatyayika Chikitsa* with Mechanical support such as a ventilator.

#### Prevention –

1. By Enhancing the immunity of individuals by various *Rasayana dravyas*.
2. Maintaining physical hygiene, the practice of yoga and pranayama, *Nasya*, wearing face-mask, and social-distancing are the following measures to prevent such infectious disease.

#### Conclusion -

The disease Covid-19 has not been portrayed in classical *Ayurvedic* texts, consequently, it goes under the idea of *Anukta vyadhi*. The

learner ought to choose their particular and own application according to necessities. *Acharyas* gave certain rules and standards as the idea of *Anukta vyadhi* to handle such recently started clinical conditions. Subsequently, Corona virus illness can be perceived based on its causative components, *Lakshana* and *vikriti vigyana*, and by considering its *dosha*, *dhatu*, *strotas*, *sadhyasadhyata*, management and prevention of disease can be possible. *Anukta vyadhis* are not interpreted by their names, the cluster of signs and symptoms and the underlying pathology can be understood by the basic principles stated above which not only helpful in understanding the pathogenesis as well as provides guidance to think as far as treatment for the equivalent.

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