



## POST COVID SYMPTOMS AND THEIR PREVENTIVE AND CURATIVES MEASURES IN AYURVEDA

<b>Kirti</b>	PG Scholar, Department of Panchakarma, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi – 110073
<b>Arun Gupta</b>	Professor and Head, Department of Panchakarma, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi – 110073
<b>Swati</b>	PG Scholar, Department of Panchakarma, Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi – 110073

### ABSTRACT

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is an infectious disease and is commonly called Covid-19. It is a contagious disease which spread across the world like wildfire. Most of the infected patients have recovered from the disease. However, many cases are suffering from various symptoms after recovery from the disease which are different from covid-19 symptoms and can be called as post covid symptoms. . At present there is no specific treatment in modern science as it is the condition which includes multi organ involvement and something to relate with immunity. Ayurveda not only deals with treatment of disease but also have great contribution in maintaining life standards in all aspects Physical, Mental, Social, Spiritual, Health promotion & prevention. Present article aims to enlisted some common post covid symptoms with their probable cause and prevention. Also aims to assess the efficacy of Ayurvedic preventive and curative measures in post covid symptoms.

### KEYWORDS :

#### INTRODUCTION

The coronavirus disease 19 (COVID-19) or Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), a pandemic, which challenged health care systems across the globe is unique and unprecedented in several aspects. It has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health. Fresh novel corona virus infections are declined, but the post-Covid-19 complications have become a major cause of worry for healthcare workers across the globe. Even after recovery, we must continue to take the utmost care of our body. Much is still unknown about how COVID-19 will affect people over time, but research is ongoing. Post covid symptoms and diseases appeared in many survivors from covid-19. Most published studies have found that 50-70% of hospitalized patients exhibits post covid symptoms. The Guideline published by the National Institute for Health and Care Excellence (NICE), the Scottish Intercollegiate Guidelines Network, and the Royal College of General Practitioners has defined long COVID as "signs and symptoms developed during or following a disease consistent with COVID-19 and which continue for more than four weeks but they are not explained by alternative diagnoses" It usually presents with clusters of symptoms, often overlapping, which can fluctuate and change over time.

#### Methods – Objective

- To enumerate post covid symptoms with their probable cause and prevention.
- To assess the efficacy of Ayurvedic preventive and curative measures in post covid symptoms.

#### Commonly Presenting Post Covid Symptoms

- Weakness/Weight Loss:** Causes- Decrease physical activity Decrease food intake, decreased gut micro biota, and decreased absorption, home quarantine led to lack of appetite due to alteration of smell and taste, that could affect food intake, leading to lean mass. Inflammation alters metabolic pathway, contributing to anorexia and decreased food intake.

Prevention- Munakka (raisins) + black piper with turmeric milk, Ashwagandha powder with milk, healthy diet.

- Shortness of Breath Causes-** Chronic inflammation, Alveolar epithelial damage, continue use of mask.

Inflammation of upper airway because of Covid causes the fibrosis of alveolar and obstructs airflow, Due to invade of

Covid virus into nasal mucosa, affecting the mucosal cells and alveoli, causing damage to alveolar tissue, causes fibrosis or narrowing of alveoli, thus Obstructs the airflow.

Prevention- Pranayama (breathing exercises), Steam inhalation, eat fresh ginger, fresh air.

- Fatigue:** Causes- Home quarantine, Antibiotics, Latent infection.

Because of home quarantine individual ends up in decreased activity, thus decreases the metabolic rate and loss of appetite cause fatigue. Latent infection causes active immune response and consumption of energy and release of free radical thus accumulation of them causes fatigue.

Prevention- Healthy diet, Golden milk, Abhayang, Yoga and Pranayam, Snehadhara

- Headache:** Causes- Covid appropriate behaviour, Nasal irritation, Manasika Bhava, lifestyle modification.

Due to Shoka, Traasa of pandemic patient end up in Apatarapana and Jagarana, due to continues use of mask, decreases the oxygen level, causing dryness of nose/nasal irritation, lifestyle modification like quarantine, isolation, and fake new causes stress overload, all these ends up in headache.

Prevention- Shiroabhayng (head massage), Shirodhara, Nasya, treat cause, Santarpam Chikitsa, Pranayam and meditation

- Throat Irritation/Dry Cough:** Causes- Vataprakopa, inflammation, gut lung axis.

Due to Vataprakopa in later stages of covid, causes drying up of Kapha Sthana i.e. Uraha Pradesh, causes Vatprakopa, Villoma Gati of Vata, causes dry cough. The nasal mucosa is able to mount a similar inflammatory response to the pulmonary airways.

Prevention- Mulethi, ginger powder with honey

- Depression and Anxiety:** Causes- Fear of illness/discrimination, social isolation, Death of family / friend.

Fear of illness and social isolation experienced by Covid 19 patients could exuberate stress in recovered patients.

Prevention- Shirodhara, Nasya, Shiro Abhayang, Ashwagandha powder, Medhya drugs like; Mandukarni, Yashtimadhu, Guduchi, Shankhpushpi and meditation.

- Sleep abnormalities (Insomnia):** Causes- Re infection, isolation, day time sleep, fear/panic. There is sense of fear and panic among patients, because of isolation and worrying about re infection. Loss of sleep not only affects mood and attention but also body immune functioning

and its ability to fight infections.

Prevention- Abhayang, Utsadan (unction), Padaa-bhayang, Sanvahana, bath, psychic pleasure, comfortable bed and home proper time.

- **Abdominal Discomfort:** Causes- Gut immunity, viral replication, oral antibiotics, and improper intake of food.

Gut holds a special place for fighting of infections in system, gut micro biota fights out virus thus helps in active immune response. Replication of virus in gut leads to cell damage and disturb gut functioning. Due to intake of oral antibiotics which destroy the gut flora and decreases absorption, improper intake of food due to loss of taste and stress and decreases functioning of gut cells all these ends up in abdominal discomfort.

Prevention- Prebiotic, curd, light food

- Reduced taste and smell
- Muscle and joint pain
- Constant body fatigue or Chronic Fatigue Syndrome
- Cognitive symptoms like confusion, forgetfulness, less focus, etc.
- If proper care isn't taken, then the individuals might develop many severe health conditions like heart damage and lung damage.

### Management Modalities For Post Covid Symptoms By Ayurveda

#### 1. AHARA

Diet plays a crucial role in the management of post COVID. Dhatusamyata, balanced state of Dosha, health of Srotas and Agni must be maintained with proper diet and regimen to maintain immunity. People can try to practising the Ayurveda diet according to their Prakriti while avoiding fried and spicy foods. Also, including herbs and spices like Turmeric and Black pepper while cooking to further strengthening the immune system and reducing inflammation. It should be Shadrasatmaka (with all six tastes) and may include green leafy vegetables, citrus fruits, onion, turmeric, tomato, garlic, ginger, Tulsi, etc.

#### 2. VIHARA:

Do's	Don'ts
Intermittent fasting, Pratimarsh Nasya, oil massage, hot bath, rest, steam, mild exercise, yoga, Pranayam (breathing exercise)	Holding urges, sleeping at day time , overeating, intense exercise, night awakening, too much bath

**Yoga/pranayama:** It improves physical health as well as mental health. Pranayama can help improving respiratory health, Yogic Neti kriya has been shown to be beneficial in prevention and useful in mild cases. Meditation can help reducing stress and in regaining health faster after virological cure is obtained.

Yoga and pranayama for respiratory system- Sethu Bandhasana, Tadasana, Shavasana, Trikonasana, Gomukhasana, Bhujangasana, Ardha chakrasana, Ushtrasana.

Nadishodhana, suryabhedana, bhastrika and dhyana

Yoga and pranayama for mental health- Katichakrasana, Urdhwahastottana, Tadasana, Trikonasana, Pashchimotanasana, Vakrasana, Makarasana, Dhanu-rasana Ujjayyi, Dhyana, Anuloma Viloma, Bhamri

#### 3. AUSHADHA

It can be-

Dravyabhoot- Shamana, Shodhana, Rasayana therapy  
Adravyabhoot- satwawjaya chikitsa

#### Shamana Chikitsa

Agni Deepana and Ama Pachana –

This method is for correcting the metabolism and digestive

system. Agni in Ayurveda is correlated with digestive power of the body and has a significant role to maintain body homeostasis, body functioning, metabolism of body and proper functioning of body. Acharya Vagbhatta told that all diseases originated from Mandaagni.

Examples of deepana and pachana dravya- Saunf powder (Fennel), chitrakadi vati, shunthi churna, warm water

Some single drug formulations for shaman chikitsa-

- Triphala
- Turmeric
- Guduchi
- Pippali
- Ayurvedic decoctions

#### Shodhana Chikitsa

Importance of Panchakarma can be described under three aspects:-

**1. Preventive Aspect** - Panchakarma in Swastha (healthy individual)

The preventive aspect Panchakarma may be applied as part of Dinacharya, Ritucharya and in the management of Vegavadhara Jana Roga. Abhyanga, Snehana, Nasya (Pratimarsha), Matra Basti, Karna Poorana etc may be included in Dincharya according to specific seasons. The major part of preventive aspect of Panchakarma is Ritushodhana. Acharya Charak gave the importance of Shodhana in Swastha and stated that Shodhana is capable of removing aggravated Doshas or toxins out from the body, it pacifies diseases, increase strength and Varna or complexion of the individual. This preventive aspect is very important in maintaining healthy state and in avoiding Dosha Prakopa Jana Diseases.

**2. Promotive Aspect** - For Rasayanadi Guna Prapti

Acharya Vagbhatta explained the importance of Shodhana before Rasayana therapy. He stated that Srotoshodhana (cleaning of channels) helps in attainment of proper Rasayana effects in addition to this it also gives clarity to intellect and strength to senses. There is formation of stable Dhatus and increase in Agni (digestive power). This also delays ageing process and thus man can live a healthy and long life.

**3. Curative Aspect** – Panchakarma in curing diseases

Acharya Charak also claimed that by treating aggravated Dosha with the help of Sanshamana Chikitsa (use of internal medicines or by fasting techniques) there may be reoccurrence of aggravation of Doshas in future but when we purify or clean our body with the help of Sanshodhana therapy there is no reoccurrence. To understand this concept, he gave example that as a plant can survive and grow again when its roots are left uncut in similar way when the aggravated Doshas and toxins are not removed from the body, it can aggravate again. So, by Sanshodhana Dosha gets treated from the root so there is no aggravation again.

#### Rasayana Therapy

Ayurvedic approach towards promoting immunity includes the use of Rasayana that comprises of proper daily regimens, seasonal regimens and consumption of medicinal herbs that enhance tissue regeneration. Among Rasayana specially Kanya Rasayana is taken to increase the longevity and intelligence and Ajsrika rasayana taken on the daily basis helps in optimizing the immune system. Herbs such as Guduchi, Amalki, Brahmi, Haridra, Tulsi, Haritaki, Ashwagandha, and Shatavari are potential immunomodulators. Regular use of these herbs either alone or in form of preparations such as Chavyanprash and Bramha rasayana helps in immune strengthening and serve as an effective prophylaxis in the management of post covid symptoms. Swarna bindu prashana (SBP) improves the immunity in infants and children.

**Satvavajaya Chikitsa: (Ayurvedic psychotherapy)**

It is a nonpharmacological approach aimed at control of mind and restraining it from unwholesome Artha (objects) or stressors. Withdrawal of the mind from unwholesome objects is known as Sattvavajaya Chikitsa or it is a treatment by Self Control. Charaka defines it as a mind controlling therapy in which a stress has been laid on restraining of mind from unwholesome objects. Thus, it includes all the methods of Manonigraha and Astanga Yoga (Yogic techniques) too.

Chittavritti Nirodha (control mind from different thoughts). The methods of self-hypnosis, positive suggestions, and counselling have been used as Satvavajaya Chikitsa in recent studies.

**DISCUSSION**

As the world faced crisis due to COVID-19 pandemic, there is one more big challenge to face is Post Covid Complications, which can also be termed as Post Covid Syndrome. The symptoms are almost same, as seen after every chronic fever, but in aggravated forms. At present there is no specific treatment for modern science as it is the condition which includes multi organ involvement and something to relate with immunity. Ayurveda not only deals with treatment of disease but also have great contribution in maintaining life standards in all aspects Physical, Mental, Social, Spiritual, Health promotion & prevention. Under Ayurveda many simple rules & regulations about Dincharya, Sadavritta, intake of food, water, storage of water are given.

**CONCLUSION**

COVID-19 pandemic along with post-COVID syndrome has raised many questions to the medical fraternity for which Ayurveda can be the solution in regard to its prevention and treatment. The Ayurvedic fundamental principles if applied as per the disease condition can certainly prevent the disease at the very first stage. The Rasayana therapy and the common Yoga protocol is an important tool in dealing with the management of post-COVID syndrome. Shodhana chikitsa eliminates aggravated Dosha and toxins out from the body and purifies the body. All these measures collectively works and will show best result in managing post covid symptoms.

**REFERENCES**

1. Carfi A, Bernabei R, Landi F, Gemelli against COVID-19 Post-Acute Care Study Group Persistent Symptoms in Patients after Acute COVID-19. *JAMA*. 2020;324:603–605. doi: 10.1001/jama.2020.12603.
2. National Institute for Health and Care Excellence (NICE), Royal College of General Practitioners, Healthcare Improvement Scotland SIGN. COVID-19 Rapid Guideline: Managing the Long-Term Effects of COVID-19. National Institute for Health and Care Excellence; London, UK: 2020. [(accessed on 30 December 2020)].
3. Gupt KA. Udar Nidan Adhyaya 12/1. In: *Ashtang Hridaya of Vagbhata*. Varanasi: Chaukhambha Bharti Academy; 2021. p. 358.
4. Shastri SN. Upakalpaniya Adhyaya 15/222. In: *Charak Samhita of Agnivesha*. Varanasi: Chaukhambha Bharti Academy; 2012. p. 222
5. Gupt KA. Rasayan Vidhi Adhyaya 39/4. In: *Ashtang Hridaya of Vagbhata*. Varanasi: Chaukhambha Bharti Academy; 2021. p. 812.
6. Gupt KA. Rasayan Vidhi Adhyaya 39/1. In: *Ashtang Hridaya of Vagbhata*. Varanasi: Chaukhambha Bharti Academy; 2021. p. 812
7. Shastri SN. Chikitsaprabhritiya Adhyaya 16/20. In: *Charak Samhita of Agnivesha*. Varanasi: Chaukhambha Bharti Academy; 2012. p. 225
8. Shastri SN. Chikitsaprabhritiya Adhyaya 16/21. In: *Charak Samhita of Agnivesha*. Varanasi: Chaukhambha Bharti Academy; 2012. p. 225
9. S.A.Dutt, Shusrut Shahinta, 11th Edition (1997), 130-132
10. Shastri SN. Tisreshaniya Adhyaya 11/54. In: *Charak Samhita of Agnivesha*. Varanasi: Chaukhambha Bharti Academy; 2012. p. 168