

UNDERSTANDING OF DIAGNOSIS AND MANAGEMENT OF SWINE FLU THROUGH AYURVEDA

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ABSTRACT

Recently deaths due to swine flu and its complications created a major havoc amongst the health professionals in India. Earlier in 2009, the similar condition was faced and in 2010 WHO declared the pandemic over. Yet cases of swine flu have been reported in India, with over 31,156 positive test cases and 1,841 deaths till March 2015. The only vaccine and medicine available for treatment of swine flu is Tamiflu whose inconclusive results and reports by British Medical Journal has put the use of Tamiflu in the pandemic under question. Swine flu is not mentioned in classical texts of Ayurveda but the science explains the factors to be understood and followed to treat such 'Anukta vyadhi' i.e. which is not mentioned in the texts. The concepts of *Trividha Bodhya Sangraha*, *Pranavaha Srotas*, *Shwas Chikitsa*, *Ritusandhi*, *Vata Kaphaja Jwara* and *Asthigata Jwara* helps in understanding the prevention, diagnosis and management and of this condition.

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INTRODUCTION

Swine flu or influenza, named as pig influenza, swine flu, hog flu and pig flu, is an infection caused by any one of several types of swine influenza viruses. Swine influenza virus (SIV) or swine-origin influenza virus (S-OIV) is any strain of the influenza family of viruses that

is endemic in pigs.^[1] Swine flu spreads very rapidly worldwide due to its high human-to-human transmission rate and due to the frequency of air travel.^[2]

Transmission to humans

People who work with poultry and swine, especially those with intense exposures, are at increased risk of zoonotic infection with influenza virus endemic in these animals, and constitute a population of human hosts in which zoonosis and reassortment can co-occur.^[3] Vaccination of these workers against influenza and surveillance for new influenza strains among this population may therefore be an important public health measure.^[4] Transmission of influenza from swine to humans who work with swine was documented in a small surveillance study performed in 2004 at the University of Iowa.^[5]

Signs and symptoms

According to the Centers for Disease Control and Prevention (CDC), in humans the symptoms of the 2009 "swine flu" H1N1 virus are similar to those of influenza and of influenza-like illness in general. Common symptoms include fever, cough, sore throat, body aches, headache, chills, fatigue, diarrhea and vomiting.

The most common cause of death is respiratory failure. Other causes of death are pneumonia (leading to sepsis),^[6] high fever (leading to neurological problems), dehydration (from excessive vomiting and diarrhea), electrolyte imbalance and kidney failure.^[7] Fatalities are more likely in young children and the elderly.

Diagnosis

The CDC recommends real-time PCR as the method of choice for diagnosing H1N1.^[8] The oral or nasal fluid collection and RNA virus preserving filter paper card is commercially available.^[9] This method allows a specific diagnosis of novel influenza (H1N1) as opposed to seasonal influenza. Near-patient point-of-care tests are in development.^[10]

Prevention and Treatment

Oseltamivir, marketed under the trade name Tamiflu, is an antiviral medication used to prevent and treat influenza A and influenza B (flu).^[11,12]

Tamiflu is being used since last 15 years and recommended by WHO as an essential medicine.^[13] It is used for prevention as well as management of influenza especially swine flu every season.

Side effects

Psychiatric symptoms, increased rates of vomiting, and headaches.^[14,15,16]

Postmarketing reports include liver inflammation and elevated liver enzymes, rash, allergic reactions including anaphylaxis, toxic epidermal necrolysis, cardiac arrhythmia, seizure, confusion, aggravation of diabetes, and haemorrhagic colitis and Stevens–Johnson syndrome.^[17,18]

Controversy of Tamiflu

In the article published by British Medical Journal (BMJ) in 2012, the efficacy of tamiflu and its safety was questioned. It was reported that the studies claiming tamiflu saved lives was based on flawed analysis. Following points were put forwards after the research of the data was done on Tamiflu and Roche pharma company who is the sole production company.^[19,20,21,22]

- ❖ WHO recommends Tamiflu, but has not vetted the Tamiflu data. EMA (European Medicine Agency) approved Tamiflu, but did not review the full Tamiflu dataset.
- ❖ CDC (Centre for Disease control) and ECDC (European Centre for disease prevention and control) encourage the use and stockpiling of Tamiflu, but did not vet the Tamiflu data.
- ❖ The majority of Roche's Phase III treatment trials remain unpublished over a decade after completion.

After the article by BMJ, more and more controversies about media hype, disease mongering came into highlight. Medical sciences took more interest in use of alternatives in the prevention and control of the disease and building up resistance and immunity against viruses.^[23] It is necessary to understand the nature of disease and the *Doshas* involved before prescribing medicines for prevention and management.

Here is an attempt to understand the disease Swine flu under Ayurveda principles. As the disease is not mentioned in Ayurveda classics, the principle of *Anukta vyadhi* is taken in to consideration.

Diagnosis of Newly originated diseases on the basis of *Trividha Bodhya Sangraha*

विकारानामकुशलो न जिह्यात कदाचन ।

न हि सर्वविकाराणां नामतोऽस्ति ध्रुवा स्थितिः ॥

स एव कुपितो दोषः समुत्थानविशेषतः ।
 स्थानान्तरगतश्चैव जनयत्यामयान बहुन ॥
 तस्मादविकारप्रकृतिरधिष्ठानान्तराणि च ।
 समुत्थानविशेषांश्च बुध्दवा कर्म समाचरेत ॥

च सु १८/४४-४६

Concept of Trividha Bodhya Sangraha is available in Charakasamhita which describes that three entities should be taken in to consideration for knowing any disease whose description is not available in classical Ayurvedic texts. The three entities are

1. *Vikarprakruti* i.e. The *Dosha* responsible for the production of the disease,
2. *Adhishthan* i.e. the location where the disease is manifested and,
3. *Samutthan Vishesha* i.e. the causative factors of the disease.

If a physician is not able to name a particular disease, he should not feel ashamed on that account because it is not always possible to name all types of diseases in definite terms. When aggravated, one and the some *dosha* may cause manifold diseases depending upon the various etiological factors and the sites of manifestation. So a physician should try to comprehend the nature of the disease, the site of its manifestation and etiological factors should then initiate the treatment. A physician who so initiates the treatment after having full knowledge of the therapeutic properties of these three aspects and paying due regard to scriptural instructions would never fail in his attempt to cure the disease.^[24]

Factors to be examined of Newly Originated Diseases

दूष्यं देशं बलं कालमनलं प्रकृतिं वयः ।
 सत्त्वं सात्म्यं तथाऽऽहारमवस्थाश्च पृथग्विधाः ॥
 सूक्ष्मसूक्ष्माः समीक्ष्यैषां दोषौषधनिरुपणे ।
 यो वर्तत चिकित्सायां न स स्वल्पति जातुचित ॥ अ ह सु १२/६७-६८

The physician who minutely examines and determines the condition of *dushyas, desa, bala, kala, anala, prakriti vaya, satva, satmya, ahara and avastha* and then decides the aggravated *doshas* and its appropriate treatment, always attains success and does not go wrong in treatment.^[25]

Treatment of Anukta Vyadhi: Undescribed diseases in Ayurveda

रोगा येऽप्यत्र नोदिष्टा बहुत्वानामरुपतः ।

तेषामप्येतदेव स्यादोषादीन वीक्ष्य भेषजम् ॥ च चि ३०/२११

There are several other diseases which are not described in this sections (Ayurveda text) with names and forms. Even such diseases are to be treated on the lines suggested in the texts after examining the *doshas* and such another factors involved in their manifestation. [26]

The other factors refer to *bhesaja* (therapeutic measures), *desha* (location), *kala* (time), *bala* (strength), *sarira* (physical features), *ahara* (diet), *satmya* (wholesomeness), *sattva* (mental attitude), *prakriti* (constitution) and *vaya* (age) which are elaborated in *sutrasthana* 15/5.

दोषदूष्यनिदानानां विपरीतं हितं ध्रुवम् ।

उक्तानुक्तान गदान सर्वानि सम्यग्युक्तं नियच्छति ॥ च चि ३०/२१२

Therapies which are opposite to the properties of the *dosas*, *dushyas* and etiological factors involved in the causation of the disease are certainly useful to cure it. If appropriately used, such therapeutic measures will cure all the diseases whether they are named or not in the text. [27]

Diseases are caused both by the aggravation and diminution of *doshas* as well as *dhatu*.. If these elements are diminished in quantity, then for their augmentation, therapeutic measures which are similar in property are to be given. Thus, these are to be treated as of opposite nature (*viruddha*). In such conditions, therapeutic measures which are opposed to *doshas* are not to be given, but those which are opposed to diminution of *doshas* are to be administered. [28]

Looking at the sign and symptoms of Swine Flu, several concepts like diseases of *pranavaha srotas*, *Shwasa Chikitsa*, *Asthi Majjagata jwara* etc. should be taken in to consideration.

Pranavaha srotas

अतिसृष्टमतिबद्धं कृपितमल्पाल्पमभीक्षणं वा सशब्दशूलमुच्छसन्तं दृष्ट्वा प्राणवहान्यस्य स्रोतांसि प्रदुष्टानिति विद्यात् । च वि ५/७

The respiratory system is mentioned as *Pranavaha srotas* and the signs of its vitiation are mentioned as too long or too restricted, aggravated, shallow or frequent respirations associated with sound and pain.^[29]

प्राणोदकान्नवहानां दुष्टानां श्वासिकी क्रिया ।। च वि ५/२६

While mentioning the therapies for the treatment of the vitiation of *pranavaha srotas*, it is said that same line of treatment should be given as described in the *Shwasa Chikitsa*. (Bronchial Asthama)^[30]

Shwasa Chikitsa

यत्किंचित कफवातघ्नमुष्णं वातानुलोमनम् ।

भेषजं पानमन्नं न तद्भितं श्वासहिकिकने ।। च चि १७/१४७

Ingredients which cause alleviation of *vayu* and *kapha*, which are hot in potency and which cause downward movement of *vayu* (*vatanulomana*) are useful as medicines, drinks and food preparations for the patients suffering from hiccup and asthma.^[31]

Vatakaphaja Jwara

शीतको गौरवं तन्द्रा स्तैमित्यं पर्वणां च रूक ।

शिरोग्रहः प्रतिश्यायः कासः स्वेदप्रवर्तनम् ।। च चि ३/८६

Feeling of cold, heaviness, drowsiness, timidity, pain in the fingers and toes, rigidity of head (*sirograha*), coryza, bronchitis, absence of sweating and moderate rise in temperature these are the signs and symptoms of *jwara* caused by the vitiation of *vayu* and *kapha*.^[32]

Asthi-Majjagata jwara

Acharya Charaka has mentioned symptoms and prognosis of *Dhatugata jwara*, when the *doshas* vitiate and attains *sthana samshraya* in particular *dhatu* to show certain specific symptoms.

Amongst them *Asthi* and *majja gata jwara* are considered *Kasthasadhya* – difficult to cure.

विरेकवमने चोभे सास्थिभेदं प्रकूजनम् ।

विक्षेपणं च गात्राणां श्वासश्चास्थिगते ज्वरे ।।

हिकका श्वासस्तथा कासस्तमसश्चातिदर्शनम् ।

मर्मच्छेदो वहिः शैत्यं दाहोऽनत्श्चैव मज्जगे ॥ च चि ३/८०-८१

When the vitiated *doshas* causing *jwara* are located in the *ashti dhatu*, then the manifested signs and symptoms are both diarrhea and emesis, pain in the bones, production of *kujana* (cooing) sound and strong movement of the body and limbs, hiccup, asthma, bronchitis, frequently entering into the darkness, pain in the vital organs, external cold and internal burning sensation are manifested.^[33]

Treatment of unnamed diseases in Ayurveda

Principles for prevention of all diseases and management of the diseases of *Pranavaha srotas* and *jwara* are mentioned as below.

Prevention is Better than Cure

तद्यथा वमनं विरेचनं च, तद्विरोधिनां च द्रव्याणां संशमनार्थमुपयोगः, तथाविधैश्च द्रव्यैः पूर्वमभिसंस्कारः शरीरस्येति । च सु २६/१०४

For prophylactic measures or preventive measures against diseases, *panchakarma* treatment is mentioned along with administration of antidotes. So if the immunity of the person is increased with the help of *Panchakarma* followed by specific *Rasayana* (Rejuvenation Therapy) drugs one can avoid such diseases.^[34]

Formulations to enhance immunity of respiratory system

- Amalaka Rasayana
- Vardhmana Pippali Rasayana
- Chyavanaprash
- Goghrita-Ksheerabhyaso
- Bhallataka Rasayana
- Lashuna Rasayana

Looking towards the incidence of Swine Flue, the concept of Ritusandhi i.e. Inter-seasonal period should also be taken into consideration

Ritu sandhi

ऋत्वोरन्त्यादिसप्ताहावृतुसन्धिरिति स्मृतः ।

तत्र पूर्वो विधिस्त्याज्यः सेवनीयोपरः क्रमात् ॥

असात्म्यजा हि रोगाः स्युः सहसा त्यागशीलनात् ॥ अ ह सु ३/५८

The seven days at the end and commencement of seasons is known as *Ritusandhi* (inter seasonal period). During that period, the regimen of the preceeding season should be discontinued gradually and that of the succeeding season should be adopted gradually; sudden discontinuation or sudden adoption gives rise to diseases caused by *Asatmya* (non – habituation).^[37]

When we look towards the history it shows the incidence of Swine Flu in Late Winter and Spring. Ayurveda advocates the theory of *Ritusandhi* i.e. the junction of two seasons where one has to take care of his regimen as sudden change in the regimen can cause the diseases. If proper awareness regarding this concept is done one can avoid the diseases which are originated due sudden change in the regimen when the season changes.

General Line of treatment of Epidemic diseases

In *Vimana sthana*, *Acharya Charka* has described the factors for epidemics and its treatment under *Janpadodwansa*.

कर्म पंचविधं तेषां भेषजं परमुच्यते ।

रसायानानां विधिवच्चोपयोगः प्रशस्यते ॥ च वि ३/१३

Five types of elimination therapies (*Vamana*, *Virechana*, *Vasti*) are considered to be the best during epidemics. They should be properly administered and rejuvenation therapy should be done.^[35]

Proposed Line of Treatment for Swine Flue

Table I: *Shodhana – Panchakarma chikitsa* ^[36]

<i>Shodhana</i>	<i>Kalpa</i>	<i>Matra</i>	<i>Kala</i>	<i>Anupan</i>
<i>Vamana</i>	<i>Madanphala Yoga</i>	2-5 g	Once in the morning	<i>Madhu+ Lavana Jala</i>
<i>Virechana</i>	<i>Erand Sneha</i>	50 ml	Once in the Morning	<i>Shunthi Kashaya/ Ushna Jalam</i>
<i>Niruha</i>	<i>Dashmulika</i>	12	Once in the	-

		<i>Prasrita</i>	<i>Morning</i>	
<i>Anuvasana</i>	<i>Erand Sneha Yoga</i>	2-3 <i>Karsha</i>	<i>Adhobhakta</i>	–
<i>Nasyam</i>	<i>Vatavidhvansa/Shvasakuthar/Shigru Patra Svarasa</i>	4- 8 <i>Gunja/</i> 60 <i>Bindava:</i>	<i>Muhurmuhu</i>	–

Table II: Shamana chikitsa ^[36]

<i>Kalpa</i>	<i>Matra</i>	<i>Kala</i>	<i>Anupan</i>
<i>Chaturhuja Kalpa</i>	2-4 <i>Gunja</i>	<i>Ananna</i> <i>Adhobhakta</i>	<i>Madhu+ ushna</i> <i>Peyam</i>
<i>Naga Gutti Mishrana</i>	2-3 <i>Gunja</i>	<i>Ananna</i> <i>Adhobhakta</i>	<i>Madhu+Sitopaladi</i> <i>Churna</i>
<i>Lakshmi Vilasa Mishran</i>	4-6 <i>Masha</i>	<i>Muhurmuhu</i>	<i>Madhu</i>
<i>Tribhuvan Kirti Rasa</i>	2-3 <i>Gunja</i>	<i>Ananna</i> <i>Adhobhakta</i>	<i>Madhu</i>
<i>Sanjeevani vati</i>	1-2 <i>gunja</i>	<i>Ananna</i> <i>Adhobhakta</i>	<i>Ardrak Svarasa,</i> <i>Madhu</i>
<i>Gojivhadi Qwath</i>	1 -2 <i>Pala</i>	<i>Ananna</i> <i>Adhobhakta</i>	<i>Ushnodaka</i>

Table III Pathyapathya ^[36]

<i>Pathya</i>	
<i>Ahara</i>	<i>Langhana</i>
<i>Anna Varga</i>	<i>Jeerna Shalyanna, Mudga, Masoor, Chanaka, Makushthak</i>
<i>Shaka varga</i>	<i>Vartak, Shigru, Patola, Karavellaka etc</i>
<i>Phala varga</i>	<i>Draksha, Dadima</i>
<i>Dugdha Varga</i>	<i>Godugdha, Goghrita</i>
<i>Paniya Varga</i>	<i>Shadangodaka, Ushnodak</i>
<i>Vihar</i>	<i>Niravacheshtanam</i>
<i>Apathya</i>	
<i>Ahara</i>	<i>Guru, Asatmya, Vidahi Annam</i>
<i>Vihar</i>	<i>Vyayama, Vyavaya, Snana, Chankramana</i>

CONCLUSION

1. Swine Flu has shown its remarkable effect on Public health in last few years.
2. The prevention and management of this disease with Tamiflu is under question after the widespread campaign of BMJ against the Roche company.
3. One has to remain aware when there is such a aggressive promotion of the disease by Media which gives a thought of Disease mongering.
4. We should not get fooled by The Big shot pharma companies and their association with big giants.

5. Instead one can rely on or give a thought to our age old traditional science in understanding such diseases.
6. We should remain open in understanding such diseases in the torch of Modern Medical science with the help of traditional medical sciences.
7. One should concentrate on boosting the Immunity of individuals so that they will not be affected by such viruses.
8. Concept of *Ritusandhi* will help individuals to take care of their regimen at the junction time of two seasons. In turn this will help them to take care of their health and to stay away from such diseases.
9. Looking towards the sign and symptoms of Swine Flu, the concepts like management of *Swasa* , *Vatakaphaja Jwara* and *Asthimajjagat jwara* will help to decide the course of action.
10. Instead of going into very costly diagnostic tools and management, such approach will give us the best cost-effective therapy to prevent and manage this disease.

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Glossary of Ayurvedic Technical terms

Adraka swarasa – Fresh juice of *Zingiber officinale* (ginger)

Adhithana – Place, base, position

Adhobhakta – Dose of medicine taken after eating

Ahara – Food, diet

Amlaka rasayana – Ayurvedic compound preparation

Anna Varga- Group of Solid Food Materials

Anukta – Unuttered, unsaid or undescribed

Ananna – Medicine to be taken Early morning empty stomach

Anupana – Drink taken with or after medicine, fluid vehicle with medicine

Anuvasna – Enema of medicated oil. One of panchakarma treatment.

Anala – Fire, digestive power

Apathya – Unsuitable, unwholesome

Asthigata – In the bones

Asatmya – unwholesome

Aupsargika – infectious

Avastha – State, condition, situation

Bala – Strength, stamina

Bhallataka rasayana – Ayurvedic compound preparation

Bhesaja – Medicament, therapeutic measures

Bodhya – factors to be known or understood

Chaturhuja Kalpa - Ayurvedic compound preparation

Chanaka – Chick pea, Bengal gram

Chyavana prasha – Ayurvedic compound preparation

Churna – A mixture of powdered herbs or single herb used as medicine

Chankramana – Walking

Chintaa = worrying

Chikitsa – Treatment, Therapy

Dadima – Pomegranate

Dashmoola - Compound of ten roots of herbs.

Desha – Country, region

Dosha - Three main forces which govern the body (vāta, pitta and kapha); literally means faulty or to cause harm, although they only do so when they are functioning abnormally. When functioning normally, they maintain the good health of the body and guide all of the normal bodily functions

Dhatu –Tissues, Seven dhatus mentioned in ayurveda

Dhatu agni - Tissue agnis; there are seven, one for each of the major tissues of the body

Draksha – Grapes

Dugdha varga - Milk and milk preparations

Dushya – Termed for dhatus which are vitiated by dosha.

Erand Sneha – Castor oil

Godugdha – Cow's milk

Goghrita – Ghee prepared from cow's milk

Gojivhadi Qwath – Ayurvedic compound decoction

Guru – Heavy

Jatharagni -The digestive fire; the most important of all the agnis. Also called kayagni (bodily fire) and antaragni (internal fire).

Jeerna – Old (jeerna shali anna – old rice)

Jwara – fever

Kala – Season, era, time

Kapha - One of the three Doshas in the body. The force behind the structure and stability of the body; the elements are water and earth; its qualities are heavy, cold, moist, static, smooth and soft; its root is in the upper stomach. Also a term for mucous

Kalpa – Medicine compound

Kashtasadhya – To be treated with difficulty, to be accomplished with difficulty

Karvellaka – Bitter gourd

Kujana – Cooing sound

Kleda – with too much moisture

Ksheerabhyasa – To take milk, habitual of taking milk

Lasuna rasayana – Ayurvedic compound preparation from garlic

Langhana – Fasting

Lavana jala – Water with salt

Lakshmi Vilasa Mishran – Herbo mineral preparation

Madanphala yoga – Medicine for purgation prepared from *Randia dumetorum*

Makustha – (*Matha*) *Phaseolus aconitifolius*, *vigna aconitifolius*, bean

Madhu – Honey

Masoor – Lentil

Majja - Bone marrow, one of the seven dhatus or tissues.

Matra – Amount

Mudga – Green gram

Muhurmuhu – Again and again, repeatedly

Naga Gutti Mishrana - Herbo mineral preparation

Nasya – Administration of medicines through nasal cavity. One of the panchakarma treatment.

Nidana – causative factors

Niruha – Enema of decoction. Also known as Asthapana vasti. One of panchakarma treatment.

Panchakarma – Five types of therapies

Paniya varga – Fluids including water

Pathya – Digestible, wholesome, suitable

Patola – Gourd

Phala varga – Fruits

Prakriti – Nature, constitution

Pranavaha srotas -The channel that carries prāna; usually refers to the respiratory system (nasal passages, sinuses, bronchi and lungs); also relates to the colon which, through the process of digestion, also extracts and absorbs a large amount of prāna; originates in the heart.

Prakopa – Vitiating of dosha. Prakopa is described as second stage in the pathogenesis of any disease

Rasa dhatu - One of the seven "dhātus" or tissues; consists of all bodily fluids (plasma, lymph, chyle, breast milk, menses). In the subtle body, provides a sense of satisfaction.

Rasayana – Medicines supposed to prevent old age and promote long healthy life

Rasavaha srotas - The channel through which ahara rasa flows; originates in the heart and blood vessels and includes lymphatic vessels; primary carrier of kapha dosha.

Ritusandhi – Junction of two seasons, transition of one season to next

Samutthana – Origin, cause

Satmya – Constitution, habituation , wholesomeness

Sattva – Mental attitude

Sahaja – Congenital factor for disease

Sangraha – Collection

Sarira – Body, physical features

Shalianna – Kind of rice

Shirograha – Disease of head, headache

Shaka varga – Vegetables

Shamana – Pacifying, allaying

Shodhana – Purification or cleansing procedures

Shigru patra swarasa – Fresh juice prepared from leaves of *Moringa oleifera* (drumstick)

Shigru – Drumstick

Shwas kuthara – A ayurvedic compound preparation

Snana – Bathing

Srotas - Channels in the body; some are gross and some are subtle. In some texts, srota is used synonymously with nadi. The ears are also called srota

Sthana samshraya – accumulation of vitiated doshas in a susceptible channel of the body.

Sroto rodha – obstruction of channels.

Sanga – Obstruction

Shandangodaka – Infusion or decoction of six drugs

Shilajatu rasayana – Ayurvedic compound preparation

Sitopaladi churna - Ayurvedic compound preparation

Sanjeevani vati – Ayurvedic compound preparation

Shwasa – Asthama

Sutrasthana – First general section of treatment

Sunthi kashaya – Decoction made from dry ginger powder

Tribhuvan Kirti Rasa – Herbo mineral preparation

Trividha – Threefold

Vamana – Medical emesis or medical vomiting used to treat kapha disorders. One of the panchakarma treatment

Vartak – Brinjal

Vata - One of the three doshas. The force within the body responsible for all motion; its elements are air and ether; its qualities are light, cold, dry, mobile, subtle and rough; its root is the large intestine.

Vatavidhwansa – A ayurvedic compound preparation

Vatanulomana – Forcing Vata (Dosha) in right direction or downward

Vasti – Medicated enema. One of the panchakarma therapy to treat Vata disorders.

Vaya - Age

Vayu - One of the three doshas. The force within the body responsible for all motion; its elements are air and ether; its qualities are light, cold, dry, mobile, subtle and rough; its root is the large intestine

Vidahi – Causing burning sensation, causing pitta elevation

Vihara – Routine and regimen

Virechana – Controlled purgation. One of the panchakarma treatment to treat pitta disorders.

Viruddha – Opposite

Vishesha – Specific

Vridhhi – increase

Vyadhi – Illness, sickness, disease

Vyayama – Exercise

Vyavaya – Sexual intercourse

Vardhamana pippali rasayana – Ayurvedic therapy given through Indian long pepper

Ushnodaka – Luke warm water

Ushna jalam – luke warm water

Niravacheshtanam - Bed rest

Prasrita – Around 180 -240 ml

Pala - 40-50 ml

Gunja – 125 mg

Karsha - 10g

Bindava - drops