

UNDERSTADING *KAPHA AVRUTTA PRANA* W.S.R. TO PATHOPHYSIOLOGY OF COPD (CHRONIC OBSTRUCTIVE PULMONARY DISORDER)

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ABSTRACT

In Ayurveda *Avarana* is discussed as one of the most basic complicated unique concept. *Vata* possesses property of *Chala* (“*Tatra Va gatigandhanyo vayu*”) which is responsible for all its function .Five different sub types of *vata* works differently at different places .Respiration is one of function of *Prana vayu*. *Uraha Pradesh* and *Kantha Pradesh* are *sanchar sthana* of *vayu*. *Uraha* also *sthana* of *Kaph*. If *Avarana* of *Pran vayu* with other *Dosha* like *Kapha* takes place in this region it can produces chronic Respiratory diseases like COPD. Chronic Obstructive pulmonary disease is one of the chronic disorders of respiratory system. If Diagnosis and treatment of COPD is done in context of *Avarana* then chronicity of disease can be reduced.

Keywords: *Avarana, Avrutta, Kapha Avrutta Prana, COPD*

INTRODUCTION

In Ayurveda concept of *AVARANA* is discussed with utmost importance. Many chronic disorders described in Ayurveda like *Sandhigat vata*, *Aamvata*, *Shwasa* are due to *Vata Prapoka*. This *Vata prapoka* is due to *Margavrodha* (encapsulation) and *Dhautu Kshaya* (depletion of *Dhatu*)¹. So normal *Utsaha* etc functions of *Vata* are retarded/obstructed². This *Kshaya* or *Margavrodha* leads to pathology of *Avarana*. Various type of manifestation of diseases are being explained in *Granthas*. *Avarana* is one of the basic fundamental concepts of Ayurveda. It is helpful to discuss pathophysiology of many complicated

diseases. Most of the time *Avarana* of *vata* in many diseases remain unidentified due to lack of keen observation of symptoms .so understanding *samprapti* of *Avarana* can help to prepare a line of treatment as *Samprpti Bhang*. In modern medicine chronic disorders are treated according to symptoms only and there is no any management to break pathophysiology of particular chronic disorders. So patients do not have long term relief from that chronic disorder. Chronic obstructive pulmonary disorder is common one among them in which there is chronically poor air flow.³ It is observed that there is obstruction to the air

flow due to excess production of cough and mucus which produces symptoms which mimics *Kapha Avrutta Prana*. Here there is something which is *Vikriti Vishama Samavaya* which helps to understand *Kapha Avrutta Prana*.

CONCEPT OF AVARANA

Avarana literally means obstruction or to cover⁴. *Vata* generally possess property of *CHALA* which is responsible for all its functions. In *Avarana* two or more entities obstruct each other and make irreversible chemical bonding which produce diseases. In any sort of *Avarana*, there may be two components. One is *Avrutta Dosha* which functions gets hampered and second one is *Avaraka dosha* which is obstructing the functioning of particular *Dosha*⁵ as in *kapha Avrutta pran*. *Avrutta dosha* is *pran* as its normal functions like *shthivan*, *Kshavathu*, *Nishwas* are hampered and *Kapha* is *Avaraka* as it is obstructing the *prana*. There are different types of *Avarana* present.⁶ *Chala gati* of *Vata* gets affected by other two *dosha* or any one of seven *dhatu*s or three *malas* (*anya Avarana*) or *Pitta* and *Kapha* obstruct *Pranadi pancha vata* (*Vishishtha Avarana*) or *Paraspara Avarana*.⁷ Either *vrudhi* or *kshaya* of particular *dhatu* produces *Vata Vyadhi* as in *Vata rakta vrudhi*⁸ of certain *dhatu* produces disease pathology *Dhatu kshaya* results in formation of *anonya Avarana*. *Avarana* can be classified as have 3 types.

1. *Doshaavritta Vata* caused by failure to control of flowing fluids.
2. *Dhatu avritta vata* caused by failure to control metabolic transformation.
3. *Paraspara Avrutta* caused by failure of nervous control

CONCEPT KAPHA AVRUTTA PRANA:

In *Kapha Avrutta Prana* there is involvement of *Prana Vayu* and *Kapha*. Both of them are individually described as follow.

PRANA VAYU: It is one type of *vata*. It stays in *shirah* but *uraha* and *kantha ara sanchar sthan* of it.

KARMA: *Hrudaya Budhi*, *Indriya chittadharana*, *Shthivan*, *Shwas* are main functions of it.¹¹ Act of respiration is described by Sharangdhara as *Nabhista Prana Vayu*¹⁰ goes outside body takes *Amber piyush* comes again into body supplies it to all over body. So any obstruction in its flow may produce respiratory disturbances.

KAPHA DOSHA: *Uraha* and *Kantha* are *sthanas* of *kapha Dosha*.¹¹

KARMA: *Sthiratwa* and *Snigdhatwa* are main properties of *kapha Dosha*. *Agnimandya* causes production of *sama styana Kapha* which may make *Avarodha* in *pranvaha strotas*.¹²

KAPHA AVRUTTA PRAN: Functions of both *dosha* in *Avarana* get hampered due to their own *Nidana*. Due to production *styan kapha* and its deposition in *uraha* and *kantha pradesha* there is obstruction to the *sanchar* of *pran vayu*. So normal function of *prana* gets hampered. So *avrutta saam kapha* produces excess *shthivan*, *kshavathu*, *vaman* and *nishwas uchwas Sangraha*.¹⁴ So this Type *Vishishtha Avarana* that is *Kapha Avrutta Prana* presentations resembles COPD.

COPD: It is chronic airway disease it is combination of chronic bronchial Asthma and emphysema. Main causes of COPD are Smoking, Air pollution, occupational exposure.³

It is obstructive lung disease in which incompletely reversible air flow and

inability to breath out fully exist. The poor air flow is result in breakdown of lung tissue (emphysema) and obstructive bronchitis.³

PATHOPHYSIOLOGY OF COPD AND KAPHA AVRUTTA PRAN

In both of these conditions pathophysiology of obstruction remains same.

1: COPD is develop as significant and chronic inflammatory response to the inhaled irritants like tobacco smoke, air pollution, and genetic causes.³

This Chronic inflammation can be assumed as *Agnimandya due to Hetu Sevan*. This *Agnimandya* is responsible for production of *Styan Kapha*.¹²

2: The inflammatory cells involved are neutrophils and macrophages. It causes narrowing of air passage. Due to infiltration of inflammatory cells mucus glands get stimulated in the airways which produce mucus. Both this narrowing and formation of thick mucus¹³ in airways make hard to breath.¹³ Low oxygen level and high co2 level in blood can occur from poor gas exchange due to decreased ventilation from

SYMPTOMS:

<i>Kapha Avrutta Prana</i> ¹⁴	COPD ³
<i>Sthivan</i>	Excess sputum production
	Excess cough
<i>Uchwas nishwas sangraha</i>	Shortness of breathing
<i>Vaman</i>	Haematemesis ¹⁵
<i>Tandra</i>	Brief un consciousness due to excess cough

DISCUSION:

If *Avarana* of *Pran* *vayu* with other *Dosha* like *Kapha* takes place in this region it can produces chronic Respiratory diseases like COPD. Chronic Obstructive pulmonary disease is one of the chronic disorders of respiratory system. If Diagnosis and

air way obstruction,Hyperinflation⁵(increase in total volume of air in lung due to inability to breath out fully)

This can be similar to accumulation *Styana Kapha in Uraha Pradesh and Kantha Pradesh*.This accumulation of *Styana Kapha* produces obstruction to *Sanchra* of *prana vayu* and hampers all its function.

3: Tobacco smoke produces free radicals which produces oxidative stress.³This oxidative stress causes destruction of connective tissue of lung. Due to this walls between many of air sacs are damaged causes fewer and large air sacs instead of tiny one. If this happens, amount of gas exchange in the lungs is reduced. This poor gaseous exchange causes low oxygen level and high co2 level in the blood.³ This can be correlated with *Kathinya* produced in *Pranvaha Strotasa*.This *Kathinya* might be causing obstruction to the process of respiration done by *Nabhista prana* described by *Sharangadhara*(reduced and poor gaseous exchange).

treatment of COPD is done in context of *Avarana* then chronicity of disease can be reduced. so understanding *samprapti* of *Avarana* can help to prepare a line of treatment as *Samprpti Bhang*. In modern medicine chronic disorders are treated according to symptoms only and there is no

any management to break pathophysiology of particular chronic disorders.

CONCLUSION: From above finding it can be concluded that symptoms as well as pathophysiology of *kapha Avruatta Vata* can be correlated with COPD. If this will be taken into mind and other factors like *prakruti, Desha, Dushya of Rugna* are considered it can be helpful to do *Samprapti Bhang* of COPD.

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