

A REALISTIC SENSE OF VATA AND EMBRYOLOGY OF ITS AILMENT W.S.R. TO AVARANA

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ABSTRACT

The practical approach regarding *vata* and its disorders are described in *ayurvedic* literatures, are very concise but there are several clue hidden in this text. Kinds of *vayu* five, this is accepted by whole *ayurvedic* text but etiology of these five type of *vayu* is same or each *vayu* have their individual etiological factors, in particular *vatika* disease what kinds of *vayu* vitiated is not described by any *ayurvedic* text. What may be the relation in between *avarana* and morbidity of *srotas* like *sanga* (~congestion i.e. due to minimize the movement of *vayu*), *shiragranthi* (~ obstruction due to organic cause) are not illustrated ornately. In *vatika* ailment, *avarana* is the most important and most complicated topic because in old age maximum population suffer with the *vata* ailments and clinician unable to diagnose and treat the disease due to lack of elaborating our knowledge due to crisis of literature regarding to diseases. Numbers and kinds of *avarana* are limited in texts but it can be elaborated which is the need of now. For illustration in *ayurvedic* literature, only twenty kinds of *ananya-avarana* are narrated but its kinds are more than two hundred are possible which are described in present review article. The dissociation of bonds of in between *dosa* and *dushya* is the treatment in general. But it is how can break; this is very simple idea i.e. reduces the mutual affinity of *dosa* and *dushya* which are also described in present manuscript.

Keywords: *vayu*, *srotas*, *dosa*, *dushya*, *avarana*, *ananya-avarana* (AA), *khavagunya*

INTRODUCTION

There is the three phases of living being i.e. creation, nourishing and maintenance and destruction or decay. According to Indian *hindu* mythology, these work is done by lord *brahma*, lord *vishnu* and lord *shiva* respectively. Similarly in our

body, these roles are played by alone *vayu* only. So it is called by several nick name like *yam* (god of death), regulator, *prajapati* (~master of creatures), *vishwakarma* (performing all sorts of functions), *vishnu* (protector) etc [1]. Hence *vayu* is the su-

preme among vital factors of the body. Broadly it may be two types, usual and vitiated. When *vayu* is usual, holds up the body systems and maintains life span but it vitiates, afflicts various disorders in the body. The usual *vayu* again divided into five types for make the specifying individual function and location in body as well as easy to understand the proportional variation in the strength of conjoined *vayu* in present *vatika* disease. For better diagnosis and dissociation of pathogenesis of *vatika* ailment, it should be clear that what kind of *vayu* vitiates, what is the etiology of this *vayu*, what types the morbidity in the *srotas* and what kinds of *avarana* and so on. After that, it becomes easy to design the treatment plan and selection of drugs.

AIMS AND OBJECTIVES:-

Present conceptual review is done with following objectives

- To craft most appropriate and realistic sense of *vata*.
- To design the embryology and general pathology of *vata* ailment.
- To ascertain the classification and clinical presentation of *vata* disease.
- To architect the principle of treatment plan on the behalf of pathology.

MATERIALS AND METHOD: During the period of conceptual and scientific study of this article, the writers were going too concerned to several *Ayurvedic* texts, text book of modern medical science, different kinds of encyclopedia, journals, magazine and sites of internet etc.

The realistic sense of vata:-

The word *vata* is derived from a *dhatu va-gatigandhanyo* which has two word *gati* and *gandhan*. The word *gati* means movement and *gandhan* means information or notice in general language but in science tongue, movement means conduction and information means impulse [2]. It means *vata* is a special type of

vital factor which has the ability to convey the massage from one place to another. In human being, this work is performed by mainly neuro- endocrine system of the body but on cellular and genetic level this work plays by several types of enzymes and m-RNA respectively. The neuro-endocrine system is the boss among all the systems of body and they organize and maintain the physiology of life.

In ancient science, *vata (vayu)* is also called as self-born and invincible because of autonomy, eternality and all-pervasiveness; this is also cause of origin, substance and demolition of life that is why worshiped by entire creation. This is invisible but manifest by its physiological functions or as ailments. It is having the several important properties i.e. sound, touch, predominance of *rajas* mental *dosha*, quick acting and frequently moving etc. Addition of these properties, *vata* is also having the *achintyaviryya* property (~ idiopathic type functions) due to this quality it has incomprehensible powers include separation of *doshas*, excreta etc., organogenesis etc., and carrying of *doshas*, *dhatu*s and *malas* etc. so it is called also head of *doshas* and congregation of disease.[3] Normal *vayu* maintain the equilibrium of *dosha* and *agni*; receives the sense of object from sensory organs and induce the action through effectory organs. Actually *vayu* is single as *agni* and have dwelling place in *pakvashaya* (~intestine) and *guda* (~rectum); it is divided into five types according to names, locations, functions and diseases [4] & [5].

1. **Prana vayu:-** It is located in head, chest, throat, tongue, mouth and nose; it moves in and out through the mouth and nose and play important role in sneezing, respiration, belching, digestion and food carries inward into stomach and sustain life. If vitiated,

then disorders related to above physiology functions are derived as hic-cough and dyspnoea (gastro and respiratory system related) etc.

2. **Udan vayu:-** This is excellent type of vayu; located in navel, chest and throat, which moves upwards by which the specific functions of speaking, singing and others voice takes place. It causes sound related disorders like voice change in *gada* and *minmin* (congenital disease) *corryza* and *hiccough* etc. when vitiated.
3. **Samana vayu:-** *Samana vayu* located in *srotasa* (channels) carrying sweat, *dosas* and other body fluids and seated besides the digestive fire. Basically it is associated with *agni*, moves in the organs where ingested food is undergoing digestion. It digests food by fanning the digestive fire and discriminates its digestive products such as *rasa*, *dosa*, urine and faeces.
4. **Vyana vayu:-** It moves throughout the body and impels circulation of all body fluids like *rasa*, *rakta* (~ blood), *lasika* (~lymph) sweats and urine etc. and it also performer five types bodily movements like flexion and extension or contraction and relaxation, upward and downward and lastly obliquely. After disturbances of physiology of it's, it causes generalized diseases like fever, diarrhoea and hypertension and others movement related ailment as tremors in parkinsonism and seizures in epilepsy etc.
5. **Apana vayu:-** *Apana vayu* is located in large intestine and uro-genital system including surrounding areas of groin region. And pools down in appropriate time and maintain physiology of faeces, urine, semen, menses and foetus. If it vitiated, it causes severe diseases of kidney (*prameha*),

ureters and bladder (*calculi*), male and female genital system (*shuka dosha*).

Embryology of vata ailment:-

Normally all *dhosas* are moving throughout the body through *srotas* (micro-path) without any obstacle and maintain physiology of body. If abnormalities or morbidity (*khavagunya*) emerges in *srotas* then congestion occurs and leads to *dosh-dushya samurchhana* (interaction of *dosa* and *dushya*). This is the most primary course of action of initiation of pathology of any disease [6]. In *ayurvedic* science, there are four types of morbidity (*khavagunya*) of *srotas* i.e. enhanced flow or excess production of fluids, congestion, flow of content in wrong direction or in wrong path [7]. But other two factors (*asaya-apkarsha* and *aavarana*) may be the responsible for breed the pathology of disease. Hence there are six factors can begin pathology of disease. The above four types of morbidity in *srotsa* are derived due to indulgence of food and way of life which are similar to *dosas* and dissimilar to *dhatu*s in traits. Due to enhancement of, especially *chala* trait among others traits of *vata dosa*, have capacity to export and lodging the remaining *dosas* (*pita* and *kapha*) which are in native place and in physiological quantities from dwelling place to another places and initiate the pathology of disease.

Avarana consists of two measurement, *avrita* (enclosed part) and *avaraka* (cover up part). These two parts constituted by *dosas*, *dhatu*s and *malas* as ingredients. There is basic problem is that which component constitute the enclosed part and which one make up cover up part. But it can explain by natural law; every movable and *amurta* subject suppressed by non-movable and *murta* subject; like this, non-movable and *murta* ingredient constitutes cover up part and movable and *amurta* in-

gradient form enclosed part of *avarana*. This theory only explains the *avarana* of *dosa*, *dhatus* and *mala* [8].

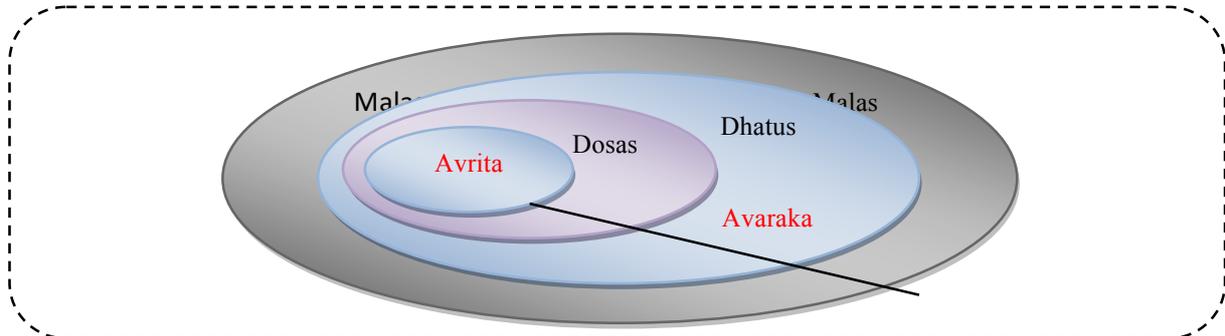


Fig-1 Diagrammatic presentation of avarana

But explanation of mutual *avarana* of *vayus*, is not possible by above theory because every *vayus* are *amurta*. But in universe, airs of different velocities can interfere in smoothly blowing of another air and result is as a cyclone like this, in our body, five types of *vayu* move in whole body in their specific path and in controlled velocity. But sometimes, due to any cause, the velocity becomes uncon-

trolled, and then *vayu* have a form of cyclone and cover up another *vayu* and make the platform of *ananya-avarana* (AA). There are only twenty kinds of *anaonayavarana* are narrated in different *ayurvedic* literatures. But theoretically, the formation of *avrita* (enclosed part) and *avaraka* (cover up part) due to alliance of one, two, three and four kinds of *vayu*, there will be two hundred types of *ananya-avarana*[9]. It has been illustrated as below in the form of table.

Table -1

*Kinds of <i>vayu</i>	Membership of <i>vayu</i> in creation of <i>ananya-avarana</i>			
1. <i>Pran vayu</i>	Single <i>vayu</i> as a <i>avrita</i> and single as a <i>avaraka</i>	Single <i>vayu</i> as a <i>avrita</i> and double <i>vayu</i> as a <i>avaraka</i>	Single <i>vayu</i> as a <i>avrita</i> and three <i>vayu</i> as a <i>avaraka</i>	Single <i>vayu</i> as a <i>avrita</i> and four <i>vayu</i> as a <i>avaraka</i>
2. <i>Udanvayu</i>				
3. <i>Samanavayu</i>				
4. <i>Byana vayu</i>				
5. <i>Apan vayu</i>				
Name and order of <i>vayu</i> acts as <i>avrita</i>	Names of <i>vayu</i> acts as <i>avraka</i>	Names of <i>vayu</i> acts as <i>avraka</i>	Names of <i>vayu</i> acts as <i>avraka</i>	Names of <i>vayu</i> acts as <i>avraka</i>
1 <i>Pran vayu</i>	2,3,4,5	2-3,4-5,3-4,2-5, 2-4,3-5	234,235,345	2345
2. <i>Udanvayu</i>	1,3,4, 5	1-3,4-5,3-4,3-5,1-5,1-4	134,135,345	1345
3 <i>Samanavayu</i>	1,2,4,5	1-2,4-5,1-4,2-5,2-4,1-5	124,125,145	1245
4 <i>Byana vayu</i>	1,2,3,5	2-3,2-5,1-3,1-2,3-5,1-5	123,125,135	1235
5. <i>Apan vayu</i>	1,2,3,4	1-2,1-3,1-4,2-3,2-4,3-4	123,124,134	1234
Subtotal of AA	20	30	15	5
Total	70			

Table-2

*Kinds of vayu	Participation of vayus in creation of <i>anonya- avarana</i>			
1 .Pran vayu 2. Udanvayu 3. Samanavayu 4. Byana vayu 5. Apan vayu	Single <i>vayu</i> as a <i>avrita</i> and <i>avaraka</i>	Double <i>vayu</i> as a <i>avrita</i> and single <i>vayu</i> as a <i>avaraka</i>	Triple <i>vayu</i> as a <i>avrita</i> and single <i>vayu</i> as a <i>avaraka</i>	Four <i>vayu</i> as a <i>avrita</i> and single <i>vayu</i> as a <i>avaraka</i>
Name and order of <i>vayu</i> acts as <i>avraka</i>	Names of <i>vayu</i> acts as <i>avrita</i>	Names of <i>vayu</i> acts as <i>avrita</i>	Names of <i>vayu</i> acts as <i>avrita</i>	Names of <i>vayu</i> acts as <i>avrita</i>
1.Pran vayu	2,3,4,5	2-3,4-5,3-4,2-5, 2-4,3-5	234,235,345	2345
2 Udanvayu	1,3,4, 5	1-3,4-5,3-4,3-5,1-5,1-4	134,135,345	1345
3 Samanavayu	1,2,4,5	1-2,4-5,1-4,2-5,2-4,1-5	124,125,145	1245
4 Byana vayu	1,2,3,5	2-3,2-5,1-3,1-2,3-5,1-5	123,125,135	1235
5 Apan vayu	1,2,3,4	1-2,1-3,1-4,2-3,2-4,3-4	123,124,134	1234
Subtotal of AA	20	30	15	5
Total	70			

Table-3

S. No.	Name of <i>vayu</i> which form <i>avrita</i>	Name of <i>vayu</i> which form <i>avaraka</i>	Numbers of AA	Name of <i>vayu</i> which form <i>avrita</i>	Name of <i>vayu</i> which form <i>avraka</i>	Numbers of AA
1	1-2	3-4,3-5,4-5	3	3-4,3-5,4-5	1-2	3
2	2-3	4-5,1-2,1-5	3	4-5,1-2,1-5	2-3	3
3	3-4	1-2,2-5,1-5	3	1-2,2-5,1-5	3-4	3
4	4-5	1-2,2-3,1-3	3	1-2,2-3,1-3	4-5	3
5	1-3	2-4,4-5,2-5	3	2-4,4-5,2-5	1-3	3
6	1-4	2-3,3-5,2-5	3	2-3,3-5,2-5	1-4	3
7	1-5	2-3,2-4,2-3	3	2-3,2-4,2-3	1-5	3
8	2-4	1-3,3-5,1-5	3	1-3,3-5,1-5	2-4	3
9	2-5	1-3,3-4,1-4	3	1-3,3-4,1-4	2-5	3
10	3-5	1-2,2-4,1-4	3	1-2,2-4,1-4	3-5	3
Sub-total of AA			30			30
Total Anonya-avarana			60			

*Note- Numbers from 1 to 5 indicates the sequences of *vayu* respectively involve in design of *anonya-avarana*.

Besides of above 200 kinds of AA, it may be several types on the account of mild, moderate and severe enhancement of each *vayu* and then form AA by incorporation to each other. So, pathology AA is very difficult to understand and to break for cure the ailment.

General pathology of vata ailments:-

In *ayurvedic* science, a discussion was organized on “how to peoples and disease generated” in ancient time. The answer and conclusion was that which factors are in suitable state, generate the person and causes the various disorders in incongruous state. It means only the use of

nutritious food promotes the growth and development of person and that of unwholesome one is the cause of disorders. But, who is noxious, is that the substances which are contrary to dehadhatus (~ body) and behave as physiological antagonism to them.

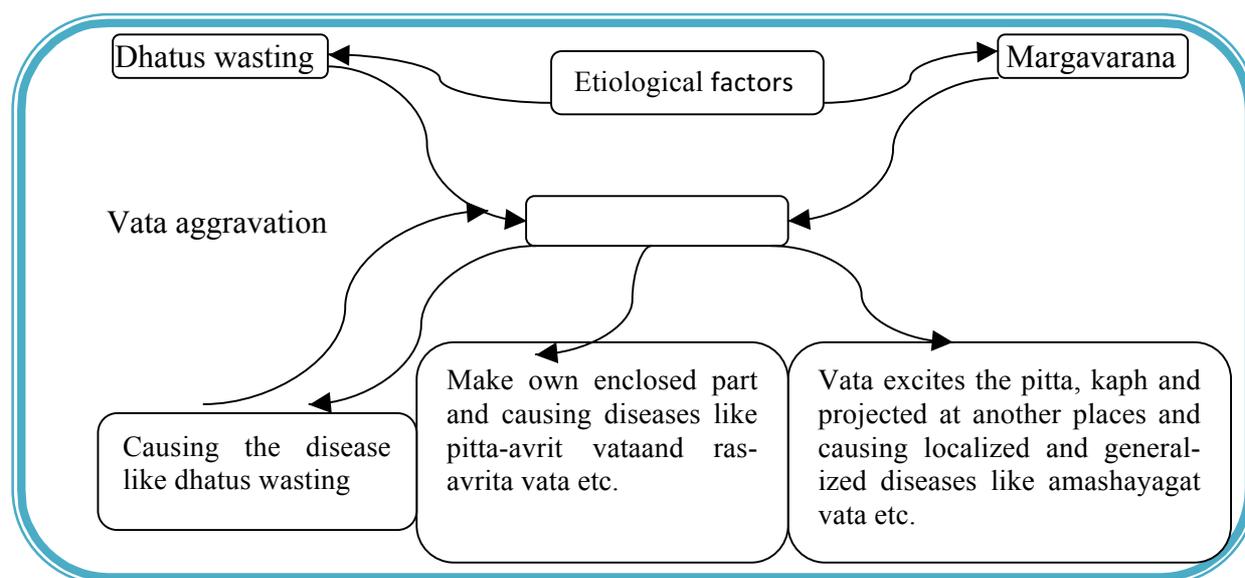
Vayu moves all over the body and impels circulation of all movable ingredients of the body and reach the nutrition to the *dehadhatus* (~ body) through *srotas* (~ micro-channels) and also transport the excreta of body to excretory organs for expel out. This physiological equilibrium disarranged either due to own individuals abnormality of *vayu* or *srotas* or movable ingredients or simultaneously of all components. There are four kind of *khavagudya* (~morbidly) of *srotas* are narrated in *ayurveda* i.e. enhanced flow or excess production of fluids, congestion or physiological impediment, obstacle due to organic or anatomical cause and flow of content in wrong direction or in wrong path. And these four types of morbidity develop due to indulgence of food and life way which are like to *dosas* and dislike to *datus* in traits.

The abnormality likes accumulation and aggravation of *vayu* is produce

due to indulgence of *vata* enhancer diet or life style mode. Vitiating of *vayu* also takes place from either *dhatukshaya* (~wasting of *ashta-sara*.) or *margavarana* (~obstruction in passage). And the next movable components like *kapha*, *pitta*, *rasa*, *rakta* etc. are vitiating due to excess and continuous intake of those substances which have the similar properties to *kaph*, *pitta*, *rasa* and *rakta*, etc.

On the account of etiological cause, there are two kinds of pathology of *vata* ailments. When the *vayu* gets aggravated due to own cause like indulgence of *vata* enhancer diet or life style mode, then it moves entire part of body randomly and filling up the vacant channels of the body and produces various disorders pertaining to the entire body or one of the parts which depends upon where is morbidity arise in *srotas*.

When the *vayu* aggravated due to *dhatu* wasting and passage obstacle, due to subtleness, *vayu* itself provokes the other two *dosas* (*pita* and *kapha*) and excite them and carrying them to different places produces different disorders and dries up the *rasa dhatu* etc [10].



Classification of vata diseases: - There are several criteria illustrated in *ayurvedic* text for categorization of *vata* ailment as mentioned in underline headings-

- On the basis of participation of dosas:
 1. *Nanatmaj vata* disease:- *nanatmaj vata* ailment arise due to specific cause i.e. *vata dosa*. Although, latter on other *dosas* may be incorporated but origination of disease only due to *vata dosa*. There are total eighty kinds of *nanatmaj vata* diseases are illustrated in *ayurvedic* text.
 2. *Samanyaja vata* disease: - having the general cause and arise due to incorporation of more than one *dosas*.
- On the basis of etiological factors:-
 1. Due to indulgence of *vata* promoting diet and way of life.
 2. Due to wasting of *dhatu*.
 3. Due to impedance in *srotas* (passage).
- On the involvement of body parts:-
 1. *Ekanga* (localized):- one or more part of body involved but never as a whole.
 2. *Sarvanga* (generalized):- whole part of body affected.
- On the basis of *samvayu karana*.
 1. *Dosas avrita janya* disease
 2. *Dhatu avrita janya* disease
 3. *Malas avrita janya* disease
- On the basis of prevalence of *vata* ailments:-
 1. Common *vata* diseases which are avail generally and not severe and easily cured.
 2. Uncommon *vata* ailment which are rarer and not cured easily. This type of diseases is mentioned in chapter of *vata* ailment in *charak samhita*.

Clinical manifestation of vata ailment:-

In each text book of *ayurveda*, the *purva-roop* (prodromal symptoms) of *vata* ailment are mentioned as *avyakta* (~latent) but it is why, it is not mentioned clearly. Similarly, in *vyakta* state, the prediction and

explanation of sign and symptoms of *vata* diseases (*avarna* derivatives specially) on behalf of *dosa-dushya* incorporation and interaction are not easy to clinician.

The possible logical explanation of latent prodromal symptoms can be dictating by separate theories. Basically, *Vata disease* is an episodic ailment like epilepsy and having two phase i.e. active and remission phase. In active phase, *vata disease* present its sign and symptoms but in remission phase patient becomes asymptomatic. Similarly in cardiac angina, there are not prodromal symptoms before attack of disease. Hence, prodromal symptoms of *vata* diseases are the asymptomatic state in between two active phases of episodic disease. Another possible explanation may be, that is due to quick action trait of *vata*. Due to fastest action of *vata*, there is not sufficient time for appears of prodromal symptoms because immediately *roopa* of disease appears. It means, time in between *sthana-sansrya* and *vyakta-vastha* is very less and which is insufficient to exhibits the prodromal symptoms of *vata* disease. The symptoms of *avarana* derivatives *vata* disease are not appear as usual according to *dosha-dushya* interaction; therefore after deeply knowledge of *dosa, dushya* and its interaction, it is not easy to understand to clinicians. The appearance of symptoms according to *dosa -dushya* interaction is not the universal theory because in case of the disorders where the sign and symptoms is not exactly in accordance with the cause due to various factors operating mutual subordination and variation in processing and interaction, it is not possible to decide the manifestation of disease on the basis of properties of individual participants. Hence, this theory is called as *vikritivisham-samvaya* [11].

Dissociation of pathogenesis of vata ailments:-

Cleavage of bond of pathogenesis depends upon the nature of etiological factors and pathogenesis:-

1. If the *vata* ailment derive due to indulgence of *vata* enhancer diet and life style,
 - *Nimita* cause should be restricted to the patient and
 - Check the formation of morbidity of *srotas*, if morbidity physiological then treat by medicine, if it is organic or anatomical then go for surgery and cleave the association of *asamvaya karana*.
2. If *vata* disease arise due to *dhatu*s wasting and obstacles of *srotas*:-
 - Here is also *nimita* cause should be restricted to the patient.
 - Remove *avarana* (~obstacle) and morbidity of *srotas* and
 - Indicate the nutrition for nourish the *dhatu*s but should not support the *vayu*.
3. If *vata* ailment due to *ashaya-apkarsha*:-
 - Bring up the *vayu* at its normal place.

RESULT AND DISCUSSION:-

Vayu is the self born, utmost, creature of life and controller of every aspect of body, so it is the super most *dosa* among tri-*dosas* because remaining *dosas* are unable to move and dependent for transportation on it. Basically *vayu* has not type of it but for knowing and better understand it is categorized into fives kinds on the behalf of physiology and anatomy of it. Embryology of pathogenesis of *vata* ailment is more or less similar to other diseases but some things are different like that derivation of *vatika* disease due wasting of *dhatu*s and *avarana* of *srotas*. *Dhatu*s wasting is a self cause of vitiation of *vayu* but due to *srotas* obstruction, nourishment of *dhatu*s hampered and progressively wasting of *dhatu*s occurs. Hence in *marga-avarana* derivative *vata* disease, initially *vata* vitiated only due to

obstacle of path but latter on *dhatu* wasting also vitiates the *vayu*. Table-1, 2 and 3 are collectively illustrated 200 kinds of AA. In Table -1, there is 70 kinds of AA which are designed as a

Single *vayu* as a *avrita* and single as a *avaraka*, single *vayu* as a *avrita* and double *vayu* as a *avaraka*, single *vayu* as a *avrita* and three *vayu* as a *avaraka*, single *vayu* as a *avrita* and four *vayu* as a *avaraka* and table-2 also represent the 70 kinds of AA but its design is vice versa of table-1. Table-3 is illustrated that there is 60 kinds of AA which are architect by two *vayu* as an *avaraka* and two *vayu* as an *avrita* and vice versa. There are several criteria for categorize the *vata* disease like basis of participation of *dosas*, basis of etiological factors, basis of involvement of body parts, basis of *samvayu karana* and basis of prevalence of *vata* ailments. All these criteria are very important for diagnosis and design treatment plan of disease as well as prognosis of patient.

CONCLUSION: -

The presence of *vayu* in living being known by its normal physiological function and its disorders. The realistic sense of *vayu* is very practical and conceptual and its uses are very important to illustration of embryology and dissociation of pathogenesis of *vata* ailments. The classification of *vata* ailment is very important for better diagnosis and design the treatment plan of disease.

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