

Review Article International Ayurvedic Medical Journal ISSN:2320 5091

CONCEPT OF VATAVYADHI IN MODERN MEDICINE

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ABSTRACT

Vatavyadhi in the present era is the most prevalent disease. Vata is the only dosha which governs all the other entities of the body like pitta, kapha, dhatu etc. diseases caused by vata in its vitiated condition are called vatavyadhi. So a proper understanding of the concept of vata is required in order to keep all the body functions in equilibrium. Although vata is said to be dominant during the old age only, but in present times, due to fast and busy life, stress, prolong sitting posture in working place, dietary habits, working late night, improper sleep etc., vata is seen to be aggravated even in the young individuals. In the Ayurvedic Classics, a number of references are found where a detail description of vata is given. So, here an attempt has been made to correlate the concept of vatavyadhi with the diseases of modern medicine. This can thereby help to understand the vatavyadhi more clearly in the modern scientific language and in turn help to improve the treatment procedure as well as in preventive aspect. Deep study of modern books was done to establish the comparison as far as possible.

Keywords: *Vatavyadhi, vata, Ayurveda,* Modern medicine.

INTRODUCTION

Ayurveda is an age old science which dates back to thousands of years. This science is based on the entities like dosha, dhatu and mala. Tridoshas, which are vata, pitta and kapha are called as the Tristhuna by Acharyas¹. Among the three, vata is the most important one. Vata is the only dosha which is responsible for vitiation of other two doshas as well as the dhatus and malas. It is also said that pitta and kapha are pangu (lame) without the involvement of vata². Sushruta has called it as "Swayambhu bhagwana"3. It is the cause of origin, existence and destruction of all living beings. Due to various causative factors, vata dosha gets vitiated which

in turn vitiate the *dushyas* and cause *vyadhi*. A comparison of the *vatavyadhi* is needed for the proper understanding of the concept of *vatavyadhi*, as they are the most severe types of diseases which afflict the individuals. A better understanding will be helpful in further treatment and prevention also.

AIM AND OBJECTIVE: To correlate *Vatavyadhi* in modern medicine

MATERIALS: This article is based on a review of Ayurvedic and Modern text-books. Materials related to *Vatavyadhi* and its modern correlation is collected to the utmost. References were taken from *Charaka Samhita, Sushruta Samhita, Astanga Hridaya* and Modern books of

Medicine.

DISCUSSION

Vata is the prime dosha and is described vividly in the Classics. The gunas of Vata as described by Charaka are ruksha (dry), sheeta (cool), laghu (light), suksma (subtle), khara (rough), chala (movement) and *vishada*(non slimy)⁴. It is invisible, but manifest by only its functions. The functions of vayu in the human body are utsah (enthusiasm), nishwasa (inspiration, expiration), functioning of vani (voice) and mana (mind), normal transformation of the *dhatus* (body tissue), proper excretion of the mala (faeces), mutra (urine), sweda (sweat)⁵. It is been rightly said that "Vayus Tantra Yantra Dharaha". In normal condition, it sustains all the organs of the body and its functions⁶. So, when this *vayu* become vitiated, it leads to abnormal condition of the above said function and gunas. Within the body, there will be various types of vata vikaras, decrease of ayu (life span), bala (strength), varna (complexion). It can even lead to death. Acharya Charaka has described 80 types of Nanatmaja Vatavyadhis. These are Nakhabheda (cracking of Nails), Vipadika (cracking of fees), Padasula (pain of feet), Pada bhramsa (feet drop), Pada suptata (numbness of foot), Vata khuddata (club foot), Gulpha graham (stiffankle), Pindiko-udvestana (cramps in the calf), Gridrasi (sciatica), Janubheda (genu varum), Januvislesa (genu valgum), Urustambha (stiffness of thigh), Urusada (pain in thigh), Pangulya (Paraplegia), etc.7

Nidana: The *nidanas* which leads to the vitiation of *vayu* are- having a war with the more powerful ones, *ativyayama* (excessive exercise), *ativyavaya* (excessive sexual activity), *ati adhyayana* excessive study), *langhana* (fasting), *plavana* (swimming), *pratarana* (falling), *ratrijagarana*

(awakening at night), are the *viharas* (physical activity). Aharas (food habit) like taking of *katu*(pungent), *tikta* (bitter), kasaya (astringent), ruksha (dry), seeta virya yukt (cold potency), suska shaka (dry vegetables), vallura (dry meat), mudga (gram), masura (lentil), anashana (starvation), adhyasana (taking meal before the digestion of previous food), vegadharana (suppression of urges) like vata (flatus), mutra (urine), purisha (faeces), sukra (secharrdi (vomiting), men). kshavathu (sneezing), *udgara* (belching), waspa (tears), etc.^{8,9}

The lakshanas of vata vriddhi are-Sankocha (contraction), stambhana (stiffness) of joints and *shoola* in the joints as well as in bones, lomaharsha (horipulation), pralapa (delirium), graham (spasticity) of hands, back as well as head. Khanja (lameness) and pangulya (total paralysis of leg) and kubjata (lunch-back), sosha (atrophy) of body parts, anidra (insomnia), Spandana (trembling of body), gatrasuptata (numbness), hundana (shrinking) of head, nose, eyes, clavicular region and neck, *Bheda* (breaking pain), toda (pricking pain), akshepaka (convulsion), karshya (emaciation), karshnya (blackishness of skin), usna kamatva (desire for hot substances), kampana (trembling), anaha (flatulence), malabarodha (obstruction to faeces), bala indriya bhramsa (loss of strength and sensory function), pralapa (incoherent talk), bhrama (giddiness),etc. 10-12

The *lakshanas* of *kshina* vata are- Anga saada (weakness), alpa bhasan (decrease speech), alpa sangya (decrease conscious), moha (delirium)¹³(A.H/Su/11/15)

Analysis of the gunas of vata¹⁴:

Laghu (light): predominancy of *vayu* and *agni mahabhoota*, possesses *tikta* (bitter), *lavana* (salty) and *katu* (pungent) *rasas*, produces lightness,decrease of strength,

dhatukshaya (decrease body tissues) emaciation, increases vata and decrease kapha in the body.

Ruksha (dry): predominancy of vayu and agni mahabhoota, possesses katu, tikta and kashaya (astringent) rasas, produces rukshata, kathinya (hard), stambhana, decreases dhatu (body tissue) and is vata vriddhikaraka.

Sheeta (cool): predominancy of vayu and jala mahabhoota, possesses tikta(bitter), madhura(sweet) and kashaya (astringent) rasas, stambhakaraka (stiffness), brimhanakaraka (increase strength), agnimandyakara (decrease digestive fire), kapha and vata vardhaka.

Suksma (subtle): sukshma srota and chidra pravesha (enter into minute channels of body), agni, vayu and akasha mahabhoota, produces snehana(oleation), stambhana (stiffness) and swedana (sweating) in the body.

Chala (movement): Chala guna can be replaced with Sara guna according to Acharya Vagbhatta. The main functions are anulomana (downward direction of vayu), pravartana (increased frequency)

Vishada (non slimy): predominancy of prithvi, vayu, agni and akasha, functions are soshana (emaciation), ropana(healing), balakshaya (decrease strength), decreases kapha.

Khara (rough): produces parushya (rough), karkashata (coarse), rukshata (dryness), apatarpana (lightness), lekhana (scarifying)inside the body. It causes vata vriddhi.

The vriddhi of *Ruksha*, *sheeta* gunas of *vata* are chiefly responsible for the production of pain, stiffness, restricted movement, atrophy, loss of strength of body as well as decrease sensory and motor fuction. The vitiation of *sheeta guna* is responsible *mala abarodha* (constipation), *lomaharsha* (horripilation) and *ushnaka*-

mitva (desir for hot substances). The laghu guna is again responsible for all the atrophy disorders, karshya. It posseses dominancy of amla (sour),katu(pungent) and tikta (bitter) rasa due to which it causes vaddhavida (constipation). The chala guna is responsible for increased pravritti. The pathological changes like spandana(trembling), kampana (shiver) which mainly occurs in the neurological diseases are due to this guna along with other gunas.

Comparision with Modern Medicine: From the analysis of *gunas*, *kupita lakshanas* of *vata* and from the 80 types of *vatika nanatmaja vyadhis*, it can be correlated with different diseases as mentioned in modern medicine which can be grouped under the following headings-

- 1. Disorders of joints and adjacent tissue¹⁵: Musculoskeletal disorders Pain related disease: shoulder pain, knee pain, hip pain Arthritis: osteoarthritis
- 2. Nerve and Muscle diseases¹⁶:

Peripheral neuropathy

Muscular dystrophies: muscle weakness, muscle pain, cramps, stiffness

Neuropathic pain- burning, tingling sensation,

Back and neck pain- Anomalies of spine

- 3. Disorders of bone and mineral metabolism¹⁷: Osteoporosis
- 4. Neurological disorders: diseases of the specific nerves
- 5. Nervous system dysfunction¹⁸: Dizziness, Vertigo, weakness, Paralysis, Numbness

The possible *Vatavyadhi* correlation with the musculoskeletal disorders and the muscle disease are:

- ♦ *Asthisosha* osteoporosis
- ♦ *Asthibheda* fragility
- ♦ *Asthishoola* ostalgia
- ♦ *Asthiparva bheda* pain, arthralgia

All the above are due to Kupita vata in asthi.

- ◆ Parvanamstambha- joint stiffness, reduced range of movement.(eg: hanustambha, manyastambha- locked jaw, torticollis)
- ♦ Panipristhasirograham- spasticity, stiff back and neck
- ◆ *Akshepak* convulsive disorders (*kupita vata in the dhamanis*)
- ◆ Avabahuka- amsasosha- Frozen shoulder (vata in amsa Pradesh)
- ♦ *Mamsakshaya* different muscle atrophy diseases (*kupita vata in mamsa*)
- ♦ Sandhishoola-joint disorders(e.g OA)

NEUROLOGICAL DISEASES¹⁹

Disorders of the first cranial nerve-

OLFACTORY this is a sensory nerve which is responsible for smell sensation. Damage of this nerve leads to Anosmia. The *vatavyadhi Ghrananasha* can be compared with this disease.

Disorders of **second** cranial nerve-

OPTIC NERVE: This nerve is a sensory nerve which is responsible for vision. The nerve is involved in trauma, vascular accidents, etc. the lesions produced due to it are papilloedema, optic neuritis. All the *netra* related disease caused by vata like *akshibheda*, *netrashoola* can be compared with this pathology.

Disorders of third cranial nerve-

OCCULOMOTOR- Ptosis - *Nimesh*, which occurs due to *vyan vayu prakopa*.

Fifth cranial nerve-

TRIGEMINAL- This is a mixed nerve. The effect of motor part is inability to move the lower jaw side to side, weakness and wasting of the massetar and temporalis muscle, inability to chew. The sensory part effects are loss of sensation of taste on the anterior two-third of the tongue on the same side. So, the *vatavyadhi* like *hanustambha*, *manyastambha*, *shankha*-

bheda, arasagyata, kasayaasyata can be correlated with the above.

Seventh cranial nerve –

FACIAL nerve- This is again a motor nerve. It supplies the individual muscles on the face. Its lesion includes facial paralysis. The clinical features are paralysis of the lower half of the face if the lesion is on the upper motor neurone. Paralysis on the one half of the face of the same side if the lesion is on the lower motor neurone. So, this disease can be correlated with the *vatavyadhi Ardita*.

Eight- cranial nerve-

AUDITORY: It has two parts. Cochlear division responsible for hearing and vestibular part responsible for maintaneance of equilibrium. The clinical features of cochlear lesion are tinnitus, deafness while of vestibular are loss of equilibrium, vertigo, giddiness. Thus it can be concluded that *ashabdasravana* (tinnitus), *badhirya* (deaf), *bhrama* (giddiness) comes under this group of diseases.

Ninth cranial nerve-

GLOSSOPHARYNGEAL: It is a mixed cranial nerve whose effects of lesion are difficulty in deglutition, loss of taste sensation in the posterior one third of the tongue- *Arasagyata* (tastelessness)

Tenth cranial nerve-

VAGUS- Effects of lesion include hoarseness of voice along with other features. The *Vata vriddhi lakshana* given by *Sushruta* as *vakparushya*(hoarseness of voice) can be compared with this.

Other comparable diseases: Pakshavadha - can be compared with Hemiplegia, Pangulya - can be compared with Paraplegia, Kampavata - It can be correlated with Parkinsonism, Viswachi- it can be correlated with brachial neuropathy, erb's paralysis, Khanja- it can be correlated with monoplegia cruralis, Pangu- it can be correlated with diplegia cruralis,

Gridhasi- it can be correlated with Sciatica, Apatantraka- it can be correlated with Hysteria, Apatanaka- it can be correlated with tetanus, Dandapatanaka- it can be correlated with Orthotonos, Antarayama-it can be correlated with Emprosthotonos, Bahyayama- it can be correlated with ophistotonos, Akshepaka- it can be correlated with Convulsive disorders, Grivahundana- it can be correlated with Cervical spondylities

CONCLUSION:

From the above explaination, it can be said that the vatavyadhis can be correlated with the diseases of Nervous system including Musculoskeletal and Neuromuscular diseases. The pathology of the disease can be understood well from both the Ayurvedic and Modern point of view. The specific gunas of vata involved in causing the disease can also be found out. So, these understandings can further help a physician to diagnose as well as treat a disease more efficiently.

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Source of support: Nil **Conflict of interest:** None declared