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PARALLEL ANALYSIS OF *ORUTHALAI VAATHAM* IN SIDDHA LITERATURE WITH MIGRAINOUS NEURALGIA

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ABSTRACT

Siddha system is one of the ancient systems of medicine with enormous historical evidence. Since this system of medicine has been originated in South India, its medical philosophies were written in palm scripts in poetic forms which cannot be easily interpreted by lay man. According to this system, the disease classification is based on the concepts of *Tridosha* pathology (*Vatham*, *Pitham* and *Kabham*) that seems poles apart from those of the International Classification of Diseases (ICD) when viewed afar. This review article is an attempt to correlate clinically, the symptoms of "*Oruthalai vatham"*, a disease given in the Siddha text *Yugi vaithya chinthaamani* with that of the *Migrainous neuralgia* in contemporary science. Through careful interpretation and comparative analysis of the condition it can be concluded that even the mediocre signs and symptoms of *'Oruthalai vatham'* can be correlated well with that of *Migrainous neuralgia*. This analysis would further provide better insight towards the diagnosis, management of the disease *"Oruthalai vatham*" as mentioned in *Siddha* literature.

KEYWORDS: *Siddha, Migrainous neuralgia, Oruthalai vatham, Yugi vaithya chinthaamani.*

INTRODUCTION

Migrainous neuralgia or Cluster headache is a primary neurovascular headache characterized with prominent unilateral cranial autonomic symptoms such as lacrimation, nasal congestion, rhinorrhea, eyelid oedema, sweating, flushing, sensation of ear fullness, miosis, and ptosis,

ipsilateral to the headacheaffecting up to 0.1% of the population.[1] Patients suffer from cluster headache attacks lasting from 15 to 180 min up to 8 times a day. The male-to-female ratio is approximately 2.5:1.[2] The attacks are characterized by the severe unilateral pain mainly in the first division of the trigeminal nerve, with associated prominent unilateral cranial autonomic symptoms and a sense of agitation and restlessness during the attacks. The pathophysiology of cluster headache is not fully understood. Current theories implicate mechanisms such as vascular dilation, trigeminal nerve stimulation, and circadian effects. Histamine release, an increase in mast cells, genetic factors, and autonomic nervous system activation may also contribute. Acute cluster headache has been shown to involve activation of the posterior hypothalamic gray matter, and is inherited as an autosomal dominant condition in about 5% of patients.[3] Having a first-degree relative with cluster headache increases the risk 14-to 39-fold.[4] The existing other terms for cluster headache are erythroprosopalgia of Bing, ciliary or migrainous neuralgia, erythromelalgia of the head, Horton's headache, histaminic cephalalgia, petrosal neuralgia of Gardner, sphenopalatine, Vidian and Sluder's neuralgia, and hemicrania periodica neuralgiformis.[5] The pathophysiology of migrainous neuralgia is complex the mechanisms are not fully elucidated. But it has been postulated to be neurovascular cause, with vascular cerebral changes being driven by the effects of trigeminal-autonomic reflex activation. The trigeminal-autonomic reflex is a pathway which consists of a brainstem connection between the trigeminal nerve and facial cranial nerve parasympathetic outflow and is activated with the stimulation of the trigeminovascular pathways.[6] Siddha pathology, relates that food and life style changes cause derangement of Vatha humor which on reaching the scalp, (hypothetically) leads to accumulation of fluid (*Kapham*) in scalp which later affects *Viyanan* (a type of *Vatha* humour responsible for flow of fluids) causing throbbing headache and the symptoms thereof.

"*Oruthalai vatham"* has been described as one among the 80 Vatha diseases in Siddha literature which is characterized by unilateral head ache, lacrimation, nasal congestion, rhinorrhea, difficulty in breathing, cough, restlessness, agitation, piloerection, fever etc. According to this system the humoural alteration has been considered as the main pathway for premonitory symptoms of all diseases. In Oruthalai vatham the chief humour affected is considered to be Vatham which is the centre of nerve function, blood circulation, respiration, sleep, appetitite and well being of an individual. Pain is the chief symptom of deranged Vatha humour. Since the derangement occurs on unilateral side of the head it is named as Oru(One sided)- thalai(Head) -Vatham(Pain). Any alteration in one of the humour would in turn affect

the other two humours resulting in Thoshams (Diseases). This review article is an attempt to correlate clinically, the symptoms of "*Oruthalai vatham"*, a disease given in the Siddha text *Yugi vaithya chinthaamani* with that of the *Migrainous neuralgia* in contemporary science.[7]

METHODOLOGY

The Siddha literature cited here was primarily taken from the *Siddha* text *Yugi vaithya chinthaamani*. A Careful analysis and correlation of *Siddha* literature with contemporary science was made after meticulous search from various reputed modern medicine books and databases such as Google scholar, Embase, Pubmed, Index copernicus, Science direct etc were searched. After the methodological collection of the above information, parallels were drawn leading to a specific conclusion.

SIDDHA LITERATURE ON *ORUTHALAI VATHAM*

According to *Yugi vaithya chintamani*, the symptoms of "*Oruthalai vatham"* are given as follows in the poem below,

"Pagaraana oruthalaiyai paathi nonthu
Pagazhi kondu moulithanai pilanthaarpola
Nigaraana kannuneer paainthu kaanthi
Nedu moochi vitumey nenaithu thunbam
Thigaraana sadanthaanum thidukundaagi
Sinukirumalaagi pasi kaanaathu
Vagaraana vaathamai mayir koochamaagum
Vatha pethathor thalaivaliyu maamey

ANOLOGY BETWEEN *ORUTHALAI VATHAM* AND *MIGRAINOUS NEURALGIA*

S.No	Symptoms of *Oruthalai vatham*	Symptoms of *Migrainous neuralgia*
1	*Pagaraana oruthalaiyai paathi nonthu*	Presence of unilateral headache
2	*Pagazhi kondu moulithanai pilanthaarpola*	Throbbing head ache as if beaten on head by violent instrument
3	*Nigaraana kannuneer paainthu kaanthi*	Watering of eyes and Hyperthermia
4	*Nedu moochi vitumey nenaithu thunbam*	Difficulty in breathing due to increased expiration
5.	*Thigaraana sadanthaanum thidukundaagi*	Sudden syncope, a sense of restlessness or agitation
6	*Sinukirumalaagi pasi kaanaathu*	Short and feeble cough, loss of appetite
7	*Vagaraana vaathamai mayir koochamaagum*	piloerection
8	*Vatha pethathor thalaivaliyu maamey*	All the said symptoms constitutes headache.

Migraine is a widespread health condition that is caused due to anatomic factors, disturbances in mucociliary clearance, microbial pathogens, and inflammatory factors.[7] It greatly reduces the the quality of life and causes health care expenditures in terms of office visits, antibiotic prescriptions filled, lost work days, and missed school days.[8] Reading between the lines of the above poem in Siddha text *Yugi vaithya chintamani*, by Sage yugi the chief area affected by the the disease is head. As the name indicates Oruthalaivatham is caused due to the derangement of Vatham and the symptoms thereof.

Scientific evaluation of symptoms of Oruthalai vatham

The first two lines "*Pagaraana oruthalaiyai paathi nonthu*" and "*Pagazhi kondu moulithanai pilanthaarpola"* means the nature of pain in this condition which indicates unilateral and throbbing in nature. T.V. Sambasivampillai a Tamil medical dictionary exclusive for Siddha medicine also correlates it with the terminologÿ "Hemicarnia" which indicates one sided facial pain due to affected facial nerve. As per T.V. Sambasivampillai dictionary, "*Pagazhi kondu"* means "*Pain caused due to a blow by violent instrument*". The nature of pain is mentioned to be severe and throbbing type. The headaches are characteristically excruciating, unilateral, and commonly involves the first division of the trigeminal nerve, over the peri- and retro-orbital regions and in the temple. The quality of the pain is severe, intense, sharp, and burning and it is commonly described to be worse than childbirth. It is aptly also known as "suicide headaches".[9]

The third line, "*Nigaraana kannuneer paainthu kaanthi*" refers the cranial autonomic symptoms, which include lacrimation, eye redness, eye discomfort such as grittiness, ptosis, nasal congestion, rhinorrhea, aural fullness, throat swelling, and flushing. These cranial autonomic symptoms are present on ipsilateral to the pain and is thought to be due to parasympathetic activation.[10,11] The majority of patients with cluster headache are restless during attacks of pain, Nausea accompanying migraine headache is common, occurring in about 90% of patients.[12]

Sometimes this **"**Exploding head syndrome" occurs at the onset of deep sleep and is not associated with any pain or swelling or any other physical trait, but associated with bright light or shortness of breath. This can be well correlated with the fourth line "*Nedu moochi vitumey nenaithu thunbam"* which indicates labored breathing and "*Sinukirumalaagi pasi kaanaathu"* which means cough with loss of appetite. Cough may be present due to post nasal drip and also due to the inflammation of the respiratory tract.[13] Approximately 0.5% of

all upper respiratory tract infections are complicated by sinusitis Because mucus trickles down the wind pipe and bronchial tubes while sleeping, cough will probably be worse at night and early in the morning. Also, post nasal drip may cause hoarseness, a sore throat besides cough.[14] According to Siddha due to the alterations in *Kirukaran vayu* which is responsible for nasal secretions and *Prana vayu* which is responsible for respiration symptoms of respiratory disease can exist which may cause breathing difficulty.

Cutaneous vasoconstriction (pallor), vasodilation (flushing), piloerection and diaphoresis can occur during the pain phase.[15] Autonomic-nervous-system-related syncope is common, with a life prevalence of 46% in migraineurs.[16] *"Thigaraana sadanthaanum thidukundaagi"* and *Vagaraana vaathamai mayir koochamaagum.*

CONCLUSION

Through this literature analysis it can be concluded that the condition '*Oruthalai vatham'* described in *Yugi vaithya chintamani* text well correlates with the clinical diagnostic features of Migrainous neuralgia under modern disease classification. Hence this review explores the inimitable intellectual competence of Siddhars in the disease diagnosis. In future, more such association between various other *Siddha* disease terminologies and the ICD nomenclature may be essential in future in order to globalize the traditional *Siddha* System of medicine.

REFERENCES

1. Headache Classification Committee of the International Headache Society (IHS), "The International Classification of Headache Disorders, 3rd edition (beta version)," Cephalalgia, 2013; 33(9): 629–808.
2. Wei DY, Yuan Ong JJ, Goadsby PJ. Cluster headache: Epidemiology, Pathophysiology, clinical features and diagnosis. Ann Indian Acad Neurol, 2018; 2 suppl S 1: 3-8.
3. Headache Classification Subcommittee of the International Headache Society. The international classification of headache disorders: 2nd edition. Cephalalgia, 2004; 24(suppl 1): 9-160.
4. Van Vliet JA, Eekers PJ, Haan J, Ferrari MD; Dutch RUSSH Study Group. Evaluating the IHS criteria for cluster headache—a comparison between patients meeting all criteria and patients failing one criterion. Cephalalgia, 2006; 26(3): 241-245.
5. Leroux E, Ducros A. Cluster headache. *Orphanet J Rare Dis*., 2008; 3: 20. Published 2008 Jul 23. doi:10.1186/1750-1172-3-20.

6. Wei DY, Yuan Ong JJ, Goadsby PJ. Cluster Headache: Epidemiology, Pathophysiology, clinical features and diagnosis. Ann Indian Acad Neurol, 2018; 21 suppl S1: 3-8.
7. Shanmugavelu M. Noi naadal noi mudhal naadal Thiratu. Part I, Chennai; Indian Medicine and Homeopathy Department, 2003; 1-30.
8. Daniel L. Hamilos, Chronic sinusitis. J Allergy Clin Immunol, 2000; 106: 213-27.
9. Settipane GA. Epidemiology of nasal polyps. Allergy Asthma Proc., 1996; 17: 231-6.
10. Bahra A, May A, Goadsby PJ. Cluster headache: A prospective clinical study with diagnostic implications. Neurology, 2002; 58: 354-61.
11. Drummond PD. Autonomic disturbances in cluster headache. Brain, 1988; 111(Pt 5): 1199-209.
12. Drummond PD. Mechanisms of autonomic disturbance in the face during and between attacks of cluster headache. Cephalalgia, 2006; 26: 633-41.
13. Peatfield, R. Migrainous features in cluster headache Current Science Inc., 2001; 5: 67.
14. Christopher C. Chang, Gary A. Incaudo, Eric Gershwin M. Diseases of the Sinuses. Second edition. London; Springer New York Heidelberg Dordrecht, 2014; 133.
15. Daniel L. Hamilos, Chronic sinusitis. J Allergy Clin Immunol, 2000; 106: 213-27.
16. Benjelloun H, Birouk N, Slaoui I et al. Autonomic profile of patients with migraine. Neurophysiol Clin., 2005; 35: 127-134.
17. Thijs RD, Kruit MC, van Buchem MA, et al. Syncope in migraine: the population-based CAMERA study. Neurology, 2006; 66: 1034-1037.