

Santhigiri Ayurveda Medical College

NEWSLETTER

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Editorial

Gurucharanam saranam

Warm greetings from the family of Santhigiri Ayurveda Medical College, Palakkad, Kerala.

All the changes those are occurring in this universe are cyclic in nature and the same is true in the context of TIME also irrespective of the duration from BrahmaKalpa to tr't'i. Among all units of TIME, aayurveda gives more importance for the unit called R'tu as it comprises of various seasonal changes which are cyclic in nature on this earth as well as in human being. The seasonal changes bring a lot of variations in the metabolism of human beings. Understanding of these seasonal changes and their effect on human metabolism is very important in preventing the various health problems. These are described in aayurveda under the heading "R'tucarya".

In recent periods, even in Kerala which stands at top in health index ratings, we have come across many seasonal health problems like Chikungunya, Nipah, H1N1, Dengue, Leptospirosis, Cholera, Typhoid along with many other viral infections. Though microorganisms have definite role in causation of various pathologies, sole emphasis on these microorganisms and their vectors by modern medical health care system is not giving any good for human society. Aayurveda understands well the various factors involved in these pathological changes and gives more importance to human being in relation with Doshas, Dooshyas, Agni etc of an individual and, R'tu, Soorya, Vaayu etc, of environment. This total system of relating human being to the immediate surroundings is called R'tucarya. Some of example of such deep understanding by our forefathers are Karkat'akamaasaacaran'a in Kerala, S'raavan'amaasaacarana in rest of south India, Vasantar'tucarya in some parts of Maharashtra. Most of of the cultural and religious events in India are celebrated with these concepts of R'tucarya for example Paanakasevana (prepared with gud'a and jeeraka) on Sreeraamanavami, special recipe called Paccad'i (prepared with neem etc) on occasion of Ugaadi, spraying decoction of inflorescence of Palaas'a on occasion of Holi, just before the summer hot, Gud'ahin~gu just before rainy season etc. The concept of R'tusandhi (fifteen days transition period between two seasons)

is unique in aayurveda and it should be properly understood and propagated by modern society for the benefit of the humankind. It advocates how one has to adopt oneself to changing weather conditions in food intake, drinks, spending the day time and night time and other day to day activities.

Though all these concepts are explained in detail in aayurveda, genuine understanding is lacking even in aayurveda academy. In BAMS very few teachers and students are there who know Caitra etc months and Mesha etc raas'i on which these concepts are explained. Nowadays there is a trend to mislead the masses in name of "Karkit'akacikitsa" by various marketing forces. There is neither genuine examination of dosha, dooshya, agni, seasonal severity etc of the client, nor proper planning of treatment. Treatment packages are advertised for making money without following the principles of management. As a result many times it ends in vitiation of balanced state of health. Even some of the genuine patients, for whom intervention is to be done without waiting for any season, are waiting for Karkit'aka month there by leading to advanced pathological conditions.

So it is need of the hour to protect the sanctity and genuinity of Aayurveda from unethical marketing forces and spread the real and healthy principles of aayurveda among the masses for the benefit of the individual and the universe.

Sarvesantu niraamayaah

Dr. G. Nagabhushanam

Chief Editor



Swami Bhaktadathan Jnanathapaswi (In charge, Santhigiri Ashram, New Delhi) greeting Shri. Shripad Yesso Naik, Minister of state (Independent charge) of the Ministry of AYUSH and Minister of State in the Ministry of Defence on his second tenure.

DEPARTMENT OF S'AALAAKYATANTRA

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A Research Cycle on Netra Marma in Eye

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Introduction

Marma are conglomeration of maamsa, asthi, snaayu and sandhi where praan'a is specially associated and trauma to this structure will result in irreversible change¹. In modern viewpoint it can be correlated with that of vital points⁴ and it refers to an area on the human body that may produce significant pain or other effects when manipulated in a specific manner. Further more marma are 107 in number and vis'alyaghna marma² comes under the broad category of classification of marma on the basis of effect of marmaabhigata. They are 3 in number and specifically it is exclaimed that death occurs upon removing the s'alya. The major concept behind coining of the name vis'alyaghna marma² is that it is no lethal until the s'alya is removed and it is a vaayupradhaana marma and after the trauma the s'alya that is embedded at the vital points indeed protects the praan'a from escaping. But if it is pulled out intensionally before the suppuration and healing process, it will lead to definitive death and the 3 vis'alyaghna marma are 2 utkshepa marma³ and 1 sthapani marma³.

Literature :

Sthapani³ and utkshepaka³ form the vis'alyaghna marma as a whole moving on to sthapani marma the aayurvedic perspective involves it is an oordhvajatrugata marma which refers to the marma associated with upper part of the body. Siraa marma refers to the marma in association with blood vessels, ardhaan~gula pramaan'a is in connection with size of marma with reference to an~guli pramaan'a. Vaayupradhaana marma indicates the excessive prevalence of of vaayu dosha in the specified marma and is one in

number and anatomically it can be exclaimed to be located between two eyebrows and is associated with following structures⁶:-

- ◆Supra trochlear artery
- ◆Supra orbital artery
- ◆Supra trochlear nerve
- ◆Frontal belly of occipito frontalis muscle
- ◆Frontal bone
- ◆Frontal nasal bone joint
- ◆Glabella up to sagittal sinus

In this context Aacaarya Sus'ruta tries to emphasize upon the concept and indeed the fact that without removing the s'alya the person can survive if and only if it is allowed to stay and drops itself after paaka and if catapulted with an anatomical approach to sthapani marma³ when a foreign body impacts any part of the body it tears the vessels and enters it. There will be no bleeding until it is forcibly removed and if it remains only tissue granulation chances will be there furthermore injury to 1/3 rd of sagittal sinus that it can be treated by ligating the anterior 1/3 of superior sagittal sinus. Micro surgical repair is most needed which is difficult here hence any depressed bony fragments, foreign objects involving dural sinuses should not be removed at all; for example if a gunshot occurs at sthapani the risk of brain injury exceeds its benefit of removal if the s'alya is not easily accessible and in sthapani if s'alya is removed forcefully it will lead to profuse bleeding and loss of vaayu causing s'osha of maamsa, vasa, majja and mastulun~ga and finally death.

Utkshepa marma³ with respect to the aayurvedic viewpoint is an oordhvajatrugata marma which indicates its position in the upper part of human body. Snaayu marma refers to the marma in connection with the ligaments of the body. Vaayupradhaana marma refers to the marma with excessive predominance of vaata dosha which are 2 in number and are located above the s'ankha marma and the anatomical correlation in the specified region includes the hair margin which can be correlated to pterion, which indeed is the name given to the region in temporal fossa where frontal⁵, parietal, temporal and sphenoid bone adjoin each other and it overlies the anterior division of middle meningeal artery and includes 3 cranial sutures-sphenoparietal, coronal and squamous suture and as far traumatic condition in the specified area is concerned a severe blow to the side of the head may fracture thin bones forming pterion and this may cause injury to dural vessels or pial vessels hence s'alya



should not be removed moreover in the case of utkshepa³ upon marma viddha. If the s'alya is removed causes vinirgati of vaayu causes s'osha of majja, maamsa, rakta and mastulun~ga causing svaasa and kaasa and death, in modern context upon removal of foreign object hemorrhage occurs causing lack of blood supply to brain and meninges in shock with metabolic acidosis finally death.

Conclusion

On the basis of discussions so far we indeed can judiciously conclude that s'hapani can be correlated to glabella, superficial and deep fascia and associated arteries, veins and nerves as it is a siraa marma. Secondly utkshepa marma can be correlated to pterion and associated meninges and temporal fascia as it is a snaayu marma. Thereby we can affirmatively say that Aachaarya Sus'ruta is indeed the greatest anatomist to walk on earth moreover the applied aspect of marma along with knowledge of regional anatomy together can do wonders in managing critical situations and thus hereby we prove the credibility of marma even today though formulated 5000 years back.

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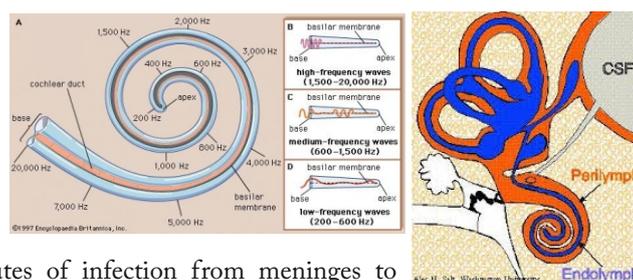
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Note : References here quoted are in vancouver referencing method.

Sensorineural Hearing Loss – A Case Report

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Sensorineural hearing loss (SNHL) results from lesions of the cochlea, VIIth nerve or central auditory pathways. It may be congenital (50-60%) or acquired (40-50%). Bacterial meningitis is the most common cause of acquired sensorineural hearing loss in children. It accounts for approximately 60–90% of all acquired cases of postlingual (late onset) SNHL cases. Cochlea is the sensorineural receptor organ of the auditory system converting an acoustic waveform into an electrochemical stimulus that can be transmitted to the CNS. Cochlea is the primary locus of meningogenic lesions including damages to hair cells, supporting cells, striavascularis and spiral ligament.



Routes of infection from meninges to labyrinth:

The cochlea consists of 3 fluid-filled ducts or scalae- scala tympani, scallavesibuli and scala media. The cochlear aqueduct which connects subarachnoid space to the basal turn of the scala tympani is the most probable conduit of meningogenic labyrinthitis.

The high frequencies are peaking toward the base of the cochlea and the lower frequencies more toward the apex. This might explain why the concentration of bacteria and inflammatory cells is high in the basal turn of scala tympani and high-frequency hearing loss associated to the basal turn of the cochlea is more pronounced than low-frequency hearing loss associated to the apex of the



cochlea. The short and patent cochlear aqueduct in children is more likely to be affected than the mature one in adults, suggesting a potential explanation of the higher incidence of postmeningitic hearing loss in children.

Pathogenesis:

The pathogenesis of bacterial meningitis leading to SNHL can be understood by two mechanisms

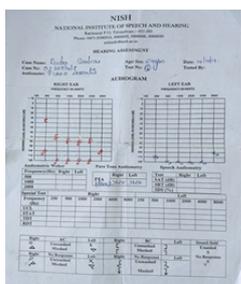
1. Inflammatory responds due to cytokines
Cytotoxic bacterial cells stimulate the release of cytokines including tumor necrosis factor (TNF-alpha) and interleukin-1 (TL-1) triggering vigorous inflammatory responses and causing damage to the cochlea.
2. Hypoxia due to inflammatory byproducts

Case Report:

A 6 year old male child presented with the complaint of bilateral hearing loss for 2 months.

Child had an attack of Bacterial Meningitis 2 months back and was managed at Sree Avittam Thirunal Institute and Technology (SAT), Trivandrum. Parents noticed that child was not responding to verbal commands by 2nd day of admission. ENT consultation was taken which revealed profound sensorineural hearing loss (Right ear) and mild to severe SNHL (Left ear). Further hearing evaluation at National Institute of Speech and Hearing (NISH) was advised at the time of discharge. Thorough audiological examination at NISH hospital lead to the diagnosis of bilateral profound sensory neural hearing loss as a sequelae of Bacterial Meningitis. Hearing aid trial (HAT) was done but he didn't get appreciable benefits and was advised for Cochlear implantation. But the parents were not willing for surgery and came for Aayurvedic management. Patient had profound hearing loss at the time of admission. Social communication of the patient was reduced and he relied more on lip reading.

Audiological evaluation (at the time of admission)



1. PTA - >120 dB
2. OAE 8% Rt, 18% Lt ear
3. Tympanometry –“A “ TYPE
4. BERRA – No peaks obtained (BL)

Aayurveda perspective: In this case baadharya occurs as upadravavyaadhi. Here invasion of bacteria can be taken as aagantuja nidaana leading to Saraktasannipaataadusht'i and sthaanasams'raya at uttamaan~ga, further leading to masthishkaavarana's'odha, paaka and s'oola. The vitiated dosha(tridosha and rakta) affect the s'abdavahanaad'i causing aavarana'a of vaayu and leads to baadharya. The treatment principle is srotos'odhana, vaataanulomana and kaphapittaaviruddha karma.

Line of management

Internal medicines

1. Asht'acoorna'm 1 tsp with butter milk before food for deepana and paacana- 3 days
2. Vicaara'nasnehapaanam with Raasnaadas'amoola ghr'utam 5gm at night with milk as anupaana.
3. Dhanadanayanaadi kashaayam 40 ml bd.

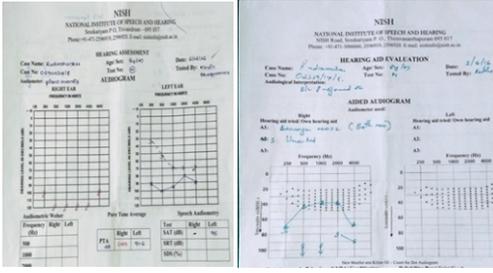
Procedures

- 1) Abhyana~gam Balaatailam & ushn'aambu snaanam- 3 days
- 2) Anulomanam- Gandharveran'd'am 2.5ml at 6am for 1 day.
- 3) Jalookaavacaran'am -Both karn'opari – 3 sitting
- 4) Pratimars'a nasyam– Eran'd'asigruaadi tailam 5 drops (4pm)- 7days
- 5) Talam–Eran'd'asigruaadi tailam & Rasnaadi coorna'm– 7 days
- 6) Local snehana & Naadisveda - Eran'd'amoola and s'igrupatra kashaaya karn'aprades'am upto swedapraadurbhaava – 5 mts - 3 days
- 7) S'irolepam - Das'amoolam, Devadaaru, Raasna, Eran'd'amoola & Balaacoorna'm- in its own Kashaaya- 7 days
- 8) Karn'apooran'a -Eran'd'as'igruaadi tailam– 7 days at 4pm (Duration- 10mts)
- 9) S'irodhaara– Eran'd'as'igruaadi tailam– 7days (30 mts)
- 10) Karn'avasti – Eran'd'as'igruaadi tailam -7 days (for 5



After 1st course of treatment the patient was able to hear loud sounds, like beating on vessels from 1m distance. There was no significant change in audiometry.

2nd and 3rd course of treatment was taken after a gap of six months. All the treatments were same but pratimars'a nasya and s'irodhaara were replaced with nasya and s'irovasti respectively. Hearing Aid Trial (HAT) was successful after 2nd courses of management and aided PTA was 36.6dB., Speech discrimination and social communication improved after 3rd



course of treatment. Ayurvedic management was successful and the recommended

cochlear implantation surgery could be avoided. Although the intervention was effective further evidence based studies in more subjects are required to validate the mentioned protocol. (Key words : PTA – Pure Tone Audiometry, OAE –Otoacoustic emissions, BERA – Brainstem Evoked Response Audiometry)

Students' Corner

Nidra - In Ayurveda

Miss.Arathy K B
Third year BAMS

Sleep is one of the important pillars which sustain life .The quality of an individual's life depends upon the sleep with proper duration and at proper time.

Aayurveda has explained nidra as one among the adhaaran'eeya vega, getting nidra at right time supports well being and good quality of life.

In A H Soo/4/12 the effects of suppression of nidra is explained as moha(confusion), heaviness of head and eyes, laziness, yawning, body pain and other diseases due to vitiation of vaata.

People due to factors like fear, anxiety, excessive physical exercise, fasting, uncomfortable bed etc are suffering from insomnia which could be overcome by some of the dietary, physical and mental practices.

Dietary Items

Intake of graamyaa, aanoopa and audaka maamsa rasa, s'aali rice with curd, milk, unctous substance and alcohol are explained in Caraka Samhita.

In Raaja Nighan't'u dhaaroshn'a ksheera, raaja palaan'du(variety of onion),buttermilk with cream, Solanum indicum etc are explained.

Mental factors

Caraka has explained the mental factors favouring good sleep as pleasure of mind, indulging in smell of scents and hearing of sounds

of desired taste.

Physical Activities

Abhyana~ga (oil massage), utsaadana (body massage), cakshu tarpan'a (application of soothing ointments to the eye), S'irolepa (application of paste on head),vadanaasya lepa (application of paste on face), svasteern'a s'ayana (comfortable bed) and ucita kaala (sleep in proper time).

Treatment of Insomnia in Aayurveda

The above mentioned factors when practiced will become saatmya so that it is not going to produce only vikaara. Person gets immediately when the etiologies of sleeplessness are removed.

One should sleep at the right time and for right duration that has been practiced. Remaining awake during night time can be compensated by sleeping for half the time that has been awake in the morning hours without taking food(should continue sleeping).

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- AH Soo/4

Sanskrit Alphabets with English Transliteration Key

अ	आ	इ	ई	उ	ऊ
a	aa	i	ee	u	oo
		ए	ऐ	ओ	औ
		e	ai	o	au
ऋ	ॠ	ऌ	ॡ	अः	अः
r'	rr'	l'		m	h
क	ख	ग	घ	ङ	
ka	kha	ga	gha	n~	
च	छ	ज	झ	ञ	
ca	cha	ja	jha	n`a	
ट	ठ	ड	ढ	ण	
t'a	t'ha	d'a	d'ha	n'a	
त	थ	द	ध	न	
ta	tha	da	dha	na	
प	फ	ब	भ	म	
pa	pha	ba	bha	ma	
य	र	ल	व		
ya	ra	la	va		
श	ष	स	ह	क्ष	ज्ञ
s'a	sha	sa	ha	ksha	jna

Medical Bulletin

AES outbreak in Bihar

In June 2019, an outbreak of Acute Encephalitis Syndrome occurred in Muzaffarpur and the adjoining districts in Bihar resulting in deaths of more than 100 children, mainly due to hypoglycaemia. The symptoms of AES include an acute onset of fever and associated neurological manifestations such as mental confusion, disorientation, delirium, convulsions or coma. Early

symptoms include headache, vomiting along with sudden hypoglycaemia and may lead to brain dysfunctions and inflammation of the heart and lungs. Those that survive AES may have long-term neurological weakness. The severe hypoglycaemia can cause death. The syndrome is locally known as chamki fever in Bihar.

The cause of the outbreak is unclear. AES can be caused by virus,



bacteria, fungi, parasites and spirochetes as well as chemicals and toxins. AES mostly affects children below 15 years. High temperature, humidity, malnutrition, poor hygiene and lack of awareness are known aggravating factors. Cases of AES tend to occur during the country's monsoon season.

Poverty and malnutrition are widespread among children in the Muzaffarpur region. Malnourished children lack a buffer stock of sugar as glycogen in the liver which puts them at higher risk of hypoglycaemia. The region is the largest producer of litchi fruits. Many research studies suggests that methylene cyclopropylglycine (MCPG) and hypoglycin A found in unripe litchi fruit can cause hypoglycemia and cited them as plausible cause of AES outbreaks.

Second Nipah outbreak in Kerala

Kerala puts 4 districts on high alert in the month of June after youth tests positive for Nipah. A year after two north Kerala districts were hit by Nipah claiming 17 lives, the disease resurfaced

in the state with a 23-year-old student confirmed to be infected with the potentially deadly virus. 311 people from various districts with whom the student had interacted were put under quarantine. Isolation wards with all facilities including ventilators were set up at medical colleges in three districts where the patient's movements have been traced- Ernakulam, Kozhikode and Thrissur.

Multi-disciplinary central teams including experts from the NIV, NCDC, AIIMS and ICMR, was deployed to support the state in conducting contact tracing, sample testing and management of the infection. Human monoclonal antibodies, considered to be effective in treating the zoonotic virus infection had been brought to Kochi. The Nipah scare in Kerala beat a retreat as the infected and suspected subjects of the virus were found to be safe, when their test results were received from the National Virology Institute in Pune.

Events

World No Tobacco Day



In connection with the World No tobacco day which is observed on 31st May of every year, the college conducted seminars, awareness classes and display of posters and articles in the campus for the students, staff, and for the patients in the OPD and IPD on 1st June 2019 as part of the awareness campaign .



Women Empowerment Programme conducted by SSGP



The SSGP unit of Santhigiri Ayurveda Medical College conducted an awareness class on "Women Empowerment" on 01.06.2019 (Saturday) by a Team lead by Ms. Krishnapriya, Sub Inspector of Police, Palakkad at our College Auditorium.



Medical camp at Odannur

A Medical Camp was conducted at Government LP School Odannur, Parli on 02.06.2019 (Sunday) by the doctors and house surgeons of Santhigiri Ayurveda Medical College Hospital.



Yoga Day awareness rally

The students and staff of SAMC participated in the awareness rally conducted by the Ayurveda DMO office palakkad on 18th June 2019 in connection with the International yoga day celebrations to be held in the district.



Fire and safety training

The students and staff of the institution underwent Fire and Safety training conducted by Fire & Rescue Service, Civil station, Palakkad on 19.06.2019.





Medical camp at Municipal town hall

Santhigiri Ayurveda Medical College Hospital conducted a medical camp for the employees of Palakkad Municipal office and general public at Palakkad Municipal Town Hall on 19.06.2019. The camp was inaugurated by Smt. Pramila Sasidharan (Municipal Chair person) and Shri C. Krishnakumar (Municipal Vice chairman) in the blessed



presence of Adharaneeya Swami Chandradeepthan Njanathapaswi. The session was chaired by Dr. G.Nagabhooshanam, Principal. The camp was led by Dr. Sasmitha P, Dr. Janani Remyaprabha njana thapaswini, Dr. Vivek Vaidyanathan and house surgeons.



Yoga training camp

Department of swasthavrutta , Santhigiri Ayurveda Medical College conducted a Yoga training camp for the inhabitants of Geriatric Centre, Kallekkad on 19.06.2019. The team consisting of Dr. Deepty Nair, Asso Professor, Department of Swastha vruta and house surgeons led the training camp.



International Yoga Day 2019

In accordance with the International Yoga Day 2019 celebrations, Santhigiri Ayurveda Medical College organized various programmes on 21-06-2019. The celebrations began at 8AM with Common Yoga Protocol & Meditation Session followed by Yoga Day Competitions based on House wise participation which included Yoga Quiz and Synchronized yoga demonstration competition.



Mentalism programme - Mind Invasion

In connection with Riddhi 2019, the 12th graduation ceremony, House Surgeons conducted "Mind Invasion", a Mentalism Programme by Dr. John S. Njarallakkat on 24th June 2019 in co-ordination with Smile Charitable Trust, Kasargode which is a non governmental organization working for oldaged and endosulfan victims. The event was



arranged as a fund raiser for the endosulfan victims.

Seminars and Visits

4th Year BAMS students attended a Seminar on Shalakyatantra at Ahalia Ayurveda Medical College, Palakkad on 27th June 2019

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