



Original Research Article

DEVELOPING AN EVIDENCE BASED ALGORITHM FOR PAIN MANAGEMENT IN MULTIPLE SCLEROSIS USING PANCHAKARMA THERAPY

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ABSTRACT

Background: Multiple sclerosis (MS) is a chronic autoimmune neurological disease marked by inflammation and demyelination in the central nervous system. Despite available immunosuppressive therapies, current treatments are insufficient in preventing disease progression. Ayurveda, particularly Panchakarma therapy, offers a holistic, detoxifying, and rejuvenative approach that may provide symptomatic relief and improve quality of life in MS patients. This study aims to develop an evidence-based algorithm for pain management in MS using Panchakarma.

Materials and Methods: A four-year observational clinical study was conducted at Jeewakberg Rehabilitation Centre, Ranchi, involving 120 female patients aged 19–50 years diagnosed with MS. Panchakarma modalities—including Snehana, Swedana, Vamana, Virechana, Basti, Nasya, and Rasayana—were administered following classical protocols. Patients also received complementary interventions such as Yoga, Meditation, and Rasayana therapy. A stepwise treatment algorithm was developed based on classical Ayurvedic principles and tailored to patient-specific factors like disease stage, strength, and comorbidities.

Results: Among the 120 participants, 80% of patients reported satisfactory improvement in pain, functional mobility, and overall well-being, with reduced dependence on corticosteroids. The remaining 20% showed limited benefit, mainly due to underlying psychiatric comorbidities such as depression, substance use, and social stigma. The Panchakarma regimen proved effective in reducing Vata aggravation, clearing Aama (toxins), and restoring Dhatu balance, thus supporting the pathophysiological framework of MS as Anukta Vatavyadhi.

Conclusion: Panchakarma therapy, when systematically applied based on Ayurvedic diagnostics and protocols, can significantly enhance pain management and quality of life in MS patients. The proposed algorithm integrates classical Ayurvedic chikitsa with evidence-based practice and may serve as a complementary or alternative therapeutic pathway for long-term MS care. Further studies with larger sample sizes and control groups are warranted.

Keywords: Multiple Sclerosis, Anukta Vatavyadhi, Panchakarma, Pain Management, Ayurveda, Autoimmune Neurological Disorder, Vata Vyadhi, Detoxification, Rasayana, Yoga

INTRODUCTION

Panchakarma is a complex system of expulsion of vitiated Doshas (toxins or waste) and bio purification of the body without giving incision. "Pancha "means "five" and "karma "means "treatment done to detoxify the body". Five procedures are claimed to eliminate the vitiated Dosha's from the body. They are Vamana (therapeutic emesis), Virechana (therapeutic purgation), Nirohasthi (Decoction enema), Anuvasanabasti (Oil enema) and Nasya (Instillation of medicine through nostrils).^[1]

Ayurveda has two equally important domains known as Swasthavritta (preventive & promotion of health) and Aturvritta (treatment of diseased) which helps to maintain normal health situations and restores the equilibrium of Doshas by different modalities of Panchakarma respectively.^[2] According to Ayurvedic theory each individual is made up of three pillars (Dosha, Dhatu & Mala) and three supportive pillars (Ahara, Nidra & Bramhacharya). Dosha, Dhatu and Mala are moving in entire body as nutrients through Srotas (channels) and on the specific Srotas. If any of the Doshas gets vitiated due to imbalance of supportive pillar of individuals, it leads to abnormality of the Srotas (channel) and leads to imbalance of normal Dosha, Dhatu and Mala. If an imbalance occurs, it leads to manifestation of disease. Panchakarma rebalances the Doshas, bringing them back to equilibrium and the individual back to good health and prevents the disease.

Panchakarma is used in Ayurvedic medicine to treat a vast array of diseases.^[3] In literature our body is nourished through a complex network of Srotas or channels or tube like structures. This network contains both microscopic and macroscopic channels. (Digestive system, nervous system, circulatory system etc are few examples of these channels).⁴ Diseases occur when toxins get accumulated in body and clog these channels. Unhealthy diet, lifestyle, stress, changes in environment etc lead to accumulation of toxins in body. These accumulated toxins have to be expelled out in order to keep our body healthy. Through Panchakarma therapy these toxic clogs are removed to normalize the physiological process. Hence Panchakarma therapy is called as detoxication therapy. Panchakarma is also used to cleanse the body before starting a treatment. A diseased body can be compared to a soiled cloth which cannot be colored as we desire. Hence to attain the maximum benefits, the body has to be purified or cleaned before starting the treatment. The cleared channels help medicines to penetrate the deeper tissues.

Multiple sclerosis (MS) is a chronic autoimmune, inflammatory neurological disease of the central nervous system (CNS). MS attacks the myelinated axons in the CNS, destroying the myelin and the axons to varying degrees and leads to focal areas of damage, axon injury, axon transection, neurodegeneration, and subsequent scar or plaque

formation. The course of MS is highly varied and unpredictable. In most patients, the disease is characterized initially by episodes of reversible neurological deficits, which is often followed by progressive neurological deterioration over time. MS affects 2.5 million individuals worldwide. It is approximately threefold common in women than men and the age of onset is typically between 20 and 40 years, but the disease can present across the life span. MS also correlates with high socioeconomic status. MS was uncommon in Indian subcontinent, but the widespread availability of MRI has led to an increased recognition of MS in India.

The cause is unknown, but the risk factors include a combination of genetic susceptibility and a nongenetic trigger, such as a virus, vitamin D deficiency or environmental factors, that together result in a self-sustaining autoimmune disorder that leads to recurrent immune attacks on the CNS.

MATERIALS AND METHODS

Material and Methods Various Aspects Of Panchakarma

- Prevention of disease
- Promotion and rehabilitation of health
- Cure of disease
- Preconception health
- Pediatric health
- Rejuvenation health
- Geriatric health
- Sensory health care
- Psychiatric health

Prevention of disease

Panchakarma plays an important role in prevention of disease but also for curing the existing disease thus maintaining good health. Ayurveda advocates Shodhana on regular basis as vitiation of Dosha sets in whenever favorable condition arises. It is explained that just as dirt develops on a Mani (diamond) kept undisturbed in due course of time, Dosha accumulates inside the body in due course of time, which need to be cleaned from time to time. Ayurveda has elaborately explained the different stages of Dosha in different Ritu which is accumulated. On the basis of Doshas, the different Ritu (seasons) and Panchakarma are explained as follows.^[5,6]

Promotion and rehabilitation of health

The world is undergoing a rapid change in all spheres; the eco system, nature and living beings are under strong survival stress due to severe pollution, climate change, population rise and other socio-economic reasons. To achieve the goal of public health, just by taking the measures such as, bringing doctor-patient gap closer, invention of new molecules for the challenging diseases and sophisticated medical aids are not sufficient, perhaps it needs a more inclusive approach of many aspects which could influence and improve human health in far better way.

In this scenario, there is a window of opportunity emerging from the corners of world towards Ayurveda specially with Panchakarma.^[7] Cure and management of disease with evidence basis long term prescription

In literature, main second Prayojana (purpose) of Ayurveda is cure of disease and now a days, even cure of condition of those who are advised surgery. Some of the diseases and Panchakarma procedures are mentioned below-

Table: Examples of disease and Panchakarma

Disease	Panchakarma
Sthaulya (obesity)	Udwartana, Ruksha Choorna Pinda Swedana and Lekhanbasti
Amlapitta (acidity)	Vamana and Virechana
Parinamashoola (peptic ulcer)	Basti and Virechana
Pakshaghat (hemiplegia)	Mridu Virechana, Asthapana-
Shwasa (asthma)	basti, Anuvasanbasti, Snehana and Swedana
Ekakushta (psoriasis)	Vamana, Virechana and Swedana
Udararoga (ascites)	Vamana, Virechana, Raktamo-
Shirahshoola (migraine)	kshana, and Nasya
Anidra (insomnia)	Nitya Virechana
Sandhivata (osteoarthritis)	Virechana, Nasya and
Amavata (rheumatoid)	Virechana, Shirodhara
Prameha (diabetes)	Nasya and Shirodhara
Agnimandya (hypothyroidism)	Snehana, Swedana and Basti
Vata Vayadi	Deepana & Pachana, Virechana
Nerulogical MS	Snehapan, Anuvasanbasti, Ksharbasti and Valuka Swedana
	Vamana, Virechana, Udwartanaand Takradhara
	Vamana, Virechana and
	Pachana
	Virechana, Vasti, Snehana,
	Swedana, Abhyaganga, Yoga Meditation, Shirodhara

Above mentioned Panchakarma procedures can be used only after examination of the patient. Ayurveda has given much emphasis to personal health and community health. In Ashtanga Hridaya, it is well described that, Dushya (Dhatu - tissue and Mala - excreta), Desha (Deha - human and Bhumi - the locality), Bala (Samarthy - stamina), Kala (diurnal and seasonal time), Anala (different states of Agni), Prakriti (Vata, Pitta and Kapha), Vaya (child, adult and old age), Sattva (mind), Satmya (food and geographical compatibility), Ahara (diet), Avastha (different phenomenal state), Sukshmasukshma (minute observation), Esham (diseases), and Dosha Aushadha Nirupanam (deciding the Doshik involvement and drugs) are the fundamental principles to be observed and considered for each patient's assessment and treatment.^[8]

Preconceptional Health

In Ayurveda, there are specific actions mentioned to all people which not only increases the chances of conception but also of having a healthy child. Ayurveda suggests Panchakarma for all expectant parents. Just as a healthy seed bears healthy fruit, the first step in having healthy sperm and egg is achieved through a deep internal cleansing to balance the Doshas and remove toxins (known as Ama) by detoxifying the body.⁹ The physician, considering the strength, should administer the formulations for promoting semen and virility after cleansing the body by nonunctuous and unctuous enema.

Pediatric health: Childhood is considered as the most important phase in life, which determines the quality of health, wellbeing, learning and behaviour across the lifespan. This may be the reason for giving the foremost position for Balachikitsa among Ashtangas (8 branches) of Ayurveda.¹⁰ The regional

growth of indigenous medicine gave significant contribution in the development of primary health care. In literature, Panchakarma is mentioned by all Acharya's in Balaroga (children health care & cure of disease), and as Amrita told by Acharya Kashyapa.

Rejuvenation health

The Panchakarma procedures like Basti, Abhyanga and Utsadana using special herbals, oils and ghee that are very much effective in enhancing sexual activity, complexion, longevity and also in achieving Dharma (virtue), Artha (wealth), Preeti (pleasure) and Yasha (fame). 11 Rejuvenation Therapy in Ayurveda aids in toning up the skin and strengthening body tissues so as to facilitate longevity. The overall resistance of the body increases as well, due to the optimization of the Ojas (primary vitality) and the Sattva (mental clarity).

Geriatric health

Ageing is inevitable. It is a natural phenomenon and an intrinsic feature of life. Ayurvedic Classics believe that human body is meant to be Shatayushi (live for 100 years) provided one follows the right daily regimen (Din Charyas & Rutucharaya) that includes Diet and exercise. The Panchakarma procedures Nitya Abhyanga (whole body Massage), Swedana (steam), and Basti (therapeutic enema) are very much effective in reducing degenerative changes, strength and longevity along with oral administration of Rasayan herbals.^[12] And also we are using now day Shirodhara, Katibasti, Janubasti, Greevabasti for improving geriatric health.

Sensory health care

The Indriyas, or senses, are the third major component of life described by Ayurveda as one branch of Ashtanga Ayurveda. The Indriyas act as a bridge between the nonphysical parts of life: Atma or

Soul and the Mind on one side, and the physical body and environment on the other. The Indriyas gather information from the outer world. Incoming perceptions get relayed to the mind in the form of sound; touch and temperature; light, color and form; taste and flavor; and smell. If the perceptual information gathered by the senses is of proper quality and quantity, it will have an uplifting and supporting influence on the mind. If it is not, it will create imbalance in the mind and, eventually, imbalance in the body. So that in this condition very useful Panchakarma therapy for prevention and cure of sensory disorders like – Snehana, Swedana, Vamana, Virechan, Nasya, Tarpana, Anjana, Ashchyotana, Pindi, Vidalak, Dhoomapaan, Kawal, Gandusha and Karnapuram.^[13]

Psychiatric health

Mental health includes our emotional, behavioral and social wellbeing. And it is also concern on the level of thinking process. Mental illnesses such as depression, anxiety or sleep problems are seen very commonly among people who have a very unhealthy lifestyle. In Ayurveda, management is counselling of the patient.^[14] And also suggests some effective regimens to stay happy and have a healthy mind. There are some effective Ayurveda therapies that are also beneficial in improving Mental Health. Which detoxify and clear any blockage that may be present in the subtle channels of the brain as well as rejuvenating and strengthening the mind. The Panchakarma procedure contains three steps: Purvakarma- Preparations which have to be done before the detoxification.

• Deepana • Pachana • Snehana • Swedana

Deepana & Pachana

These steps are adopted to cleanse the channels and Ama (toxins), so that the toxins are detached and eliminated easily during main detoxifying process. The hard toxic clogs are loosened by increasing body fire or Agni. Medicines are administered internally for this purpose. This process is called Deepana and Pachana, the duration of this process is 3-5 days depending on the patient and diseases.

Snehana

After Deepana & Pachana whole body is oiled with Snehapana (oral) and Abhyanga (massage).^{15,16} Patients are asked to drink a specific amount of medicated ghee or oil for a specific period. The amount of medicated ghee or oil is gradually increased on daily basis. The course of Snehapana may take 3 to 7 days. Abhyanga (massage) is done with medicated oil or ghee and may take 1 to 4 days or as required, Snehapana and Abhyanga is a part of Snehapana therapy, and it cures the vitiated Vata Dosha, which makes the body soft and disintegrates the accumulation of vitiated Doshas (toxins or waste).

Swedana/Transdermal Medicinal Kit Therapy

Swedana is the process of inducing sweat with the help of steam, made from medicated herbal decoctions. It is the pre-operative procedure in various Ayurvedic detox therapies where the objective is to dilate the channels of the body to

detach the vitiated Doshas (toxins or waste) from the tissues. Ayurvedic fomentation is usually given after an oil massage.^[17]

Vashpa Swedana- The fomentation is done by making the person to sit in the chamber where steam emanates from boiling herbal decoction.

Naadi Swedana- Naadi Swedana is a penetrating heat. It is a more penetrating type of wet heat than Vashpa Swedana. This is given to whole body or particular region of body using a tube; importance is given to specially in joint disorders. If the vitiated Vata in the body is corrected by sudation preceded by oleation procedure, his urine, stool and semen do not get inspissated. Even dry inanimate sticks, treated with oiling and sweating, become soft and elastic. The same principle applies with greater force to animate human bodies.

Pradhanakarma- The main detoxifying process:

- Vamana
- Virechana
- Niroohabasti
- Anuvasanabasti
- Nasya

Vamana karma

The process of expelling vitiated Doshas (toxins or waste) through the upward tract (mouth) is called Vamana karma (induced emesis). It is mainly indicated in vitiated Kapha-Pitta Dosha and Kaphaja disorder. Many drugs can be used for Vamana karma but the most common drug is Madanphala. Drugs which are Ushna(hot), Tikshna (sharp), Sukshma (subtle), Vyavayi (those pervading the entire body before getting digested) and Vikasi (those causing looseness of joints), by virtue of their own potency, reach the heart, and circulate through the vessels. Because of their Agneya nature (predominance of Agni Mahabhuta) they liquify the compact (adhered) Doshas and because of their sharpness, they separate the adhered Doshas located in the gross and subtle channels of the entire body. Like honey kept in a pot smeared with fat, the vitiated Doshas, after separation, starts floating without adhesions in the body which has been oiled (by the administration of oleation therapy). Because of its nature to move through subtle channels and flowing (towards the gastro-intestinal tract) the vitiated Doshas reach the stomach, and gets propelled by Udana Vayu.^[18]

Process of Vamana karma respectively –

- Akanthyapaan – with milk, ekshu rasa, nimba kwatha etc
 - Vamana yoga – Madanaphala, Ekshavaku etc.
 - Vamanopaga – Yashtiphanta
 - Dhoomapana –Snehika, Shamana, Virechnik
- Action of Vamana karma on the basis of modern physiology – • Local irritation
- Increased volume
 - Stimulation of vomiting center
 - Virechana karma

The process of expelling vitiated doshas (toxins or waste) through the downward tract (rectum) is called Virechana karma (therapeutic purgation).^[19] The Virechana karmais medicated purification, cleansing

the body from excess Pitta-Kapha accumulation, purifying blood and clearing toxins. The therapy primarily concentrates on the toxins accumulated in the liver and gall bladder, thus cleansing the gastrointestinal tract completely.

Niroohabasti

Niroohabasti is the specialized Panchakarma procedure to cure Vata related disorders. It is best treatment for the vitiated Vata dosha or Vataja disorder. In this procedure using decoctions administered through the rectal route, it pacifies the aggravated Vatadosha.^[20]

Anuvasanabasti

AnuvasanaBasti is used to treat the people suffering from severe dryness, who have good digestive fire and purely Vatavyadhi (nervous system, musculoskeletal system disorder etc).^[21] This procedure with small amount of oil can be used for an equilibrium of Vata Dosha. Warm oil with a little amount of Shatapushpa kalka and Saindhav is used.

Nasya

Nasal Cavity is the door to consciousness and the pathway to our brain. Medications that are administered via the nasal passages affect the Mind, Prana Vayu, Tarpaka Kapha, Sadhaka Pitta, and Majja Dhatu. Nasya is administered empty stomach, patient is told to lie down with the head tilted back and Nasya drug is administered in each nostril.^[22] Pashchat karma- Modifications in diet and lifestyle after the detoxification process.

- Peyadi or Tarpanadi Samsarjana karma
- Brimhana
- Abhyanga, Utsadana and basti

- Use oral administration of Rasayan & Vajikara

PATHOGENESIS

Predisposing factors such as genetic, environmental and infection triggers the activation of myelin-reactive Th1/17 cells due to which there will be infiltration in CNS further leading to blood brain barrier breakdown. As a result, immune cell recruitment occurs causing CNS tissue damage and neurological dysfunction will be seen.^[20]

TYPES OF MULTIPLE SCLEROSIS

Types of MS are considered important not only for prognosis but also for treatment decisions and include: Relapsing remitting MS (RRMS), Primary progressive MS (PPMS), Secondary progressive MS (SPMS), and Progressive relapsing MS (PRMS)

- Secondary-progressive MS (SP-MS)

Secondary-progressive MS (3 PMS) always begins as RRMS. At some point, however, the clinical course changes so that the patient experiences a steady deterioration in function unassociated with acute attacks. For a patient with RRMS, the risk of developing SPMS is ~2.5%each year

- Primary-progressive MS (PP-MS)

Primary-Progressive MS (PPMS) account for ~ 15% of cases. These patients do not experience attacks but only a steady functional decline from disease onset.

- Progressive/relapsing MS (PR-MS)

Progressive/relapsing MS (PR-MS) accounts for ~ 5% of cases. These patients experience a steady deterioration in their condition from disease onset along with occasional attacks superimposed upon their progressive course.^[24]

Symptoms and signs of MS^[25]

Site of	Symptoms	Sign
Spinal cord	Limb weakness	Spasticity
	Lhermitte's symptom	Pyramidal weakness
	Stiff legs	Hyper-reflexia
	Sensory impariment	Absent abdominal reflexes
	Erectile dysfunction Urinary frequency and retention constipation	Extensor plantars
Brain stem	Ataxia	Internuclear
	Diplopia	ophthalmoplegia
	Dysarthria	Nystagmus
	Dysphagia	Gaze plasies
	Facila numbness/weakness	Facial sensory loss
Cerebellum	Unsteady gait and slurred speech	Rubral tremor
		Gait and limb ataxia
		Dysarthria Nystagmus
Optic nerve	Unilateral visual loss and painful eye	Relative afferent pupillary defect
	Movements	Lost colour vision/acuity
		Optic atropy (late sign)
Cerebrum	Poor memory	Dementia
	Personality change Epilepsy	(Subcortical)

Diagnosis

- No denitive diagnostic test for Multiple sclerosis
- Two or more episodes of symptoms and two or more signs that reflect pathology in anatomically noncontiguous white matter tracts of the CNS (Diagnostic criteria for multiple sclerosis 2010 - McDonald criteria)

Investigations

- MRI scans of the brain and spinal cord, which may reveal lesions
- Spinal fluid analysis, which may identify antibodies that suggest a previous infection
- Evoked potential test, which measures electrical activity in response to stimuli

Treatment

Therapy for MS can be divided into three categories

- Treatment of acute attacks
- Treatment with disease modifying agent that reduce the biologic activity of MS
- Symptomatic therapy.

Treatments that promote remyelination or neural repair do not currently exist. The Common side effects include headache, diarrhoea, back pain, cough, and abnormal liver tests and may lead to progressive multifocal leukoencephalopathy (PML), a rare brain infection.^[26]

Ayurvedic perspective

In MS, the immune system attacks the protective sheath (myelin sheath), which is a lipid-rich (fatty) substance that surrounds nerve cell axons can be understood as Snayu for medfrommedas (medasahasnayusambhavaha).^[27] The explanation which resemble multiple sclerosis is not accessible specifically as separate disease entity in any of the major Ayurvedic texts. Any disease related to nervous system of the body can be considered in the umbrella of 'Vata Vyadhi'. Vata dosha having its main lakshana as gati (movement) and gandhana (knowledge perception) are generally attributed to nervous system of contemporary science exhibiting the same functional properties. Among tridoshas the supremacy of vata is explained by all our Acharyas as "pittam phangu kapham phangu phangavo mala dhatavah, Vayuna yatra niyante tatra gacchati megghavat".^[28] Vata when unvitiated holds up the systems and organs, initiates movements, leads and controls mind, helps in proper functioning of organs, carries sense objects. So, when this vayu become vitiated, it leads to abnormal condition.^[29]

Nidana and Samprapti

The nidana can be either dhatu kshaya or aavarana leading to its respective pathogenesis.^[30] In dhatu kshaya condition vata kara Nidana Sevana produces Vata Prakopa.^[31] The concept of autoimmunity can be understood under the purview of ama which leads to aavarana and later dhatu kshaya. Ama is incompletely digested metabolic substances. At an early stage Ama can be easily cured, but as this condition persists for an extended period of time it hinders the physiological channels of the body, slows down the metabolism that result again in more production of Ama. In the initial phase, when the Ama is in the larger body channels, body try an alternative way to get rid of the toxins. However, in case of chronic conditions or if there are repeated suppression of Ama, toxins get accumulated deep in the cells and when the level of tissue has penetrated, immune system starts to attack the affected cells. This causes inflammation or allergic reactions that without

proper treatment can lead to auto-immune diseases.^[32]

Nidana sevana → Dhathu kshaya and Margavarana → leads to Vataprakopa → causes Sthanasamshraya in Snayu → and causes Vatavyadhi.

The lakshanas of vatavyadhi are Sankocha (contraction), stambhana (stiffness), shoola (pain) in the joints as well as in bones, graha (spasticity) of hands, back, Khanja (lameness) and pangulya (total paralysis of leg) and kubjata (lunch-back), sosha (atrophy) of body parts, anidra (insomnia), Spandana (trembling of body), gatasuptata (numbness), bheda (breaking pain), toda (pricking pain), akshepaka (convulsion), kampana (trembling), anaha (flatulence), malaparodha (obstruction to faeces), balaindriya bhramsa (loss of strength and sensory function), pralapa (incoherent talk), bhrama (giddiness) and various other symptoms based on hetu and sthana.^[33]

The inherent natural qualities and actions of vata such as (roughness), gati (movement), anavasthithatvam (instability) are obviously manifested partially or wholly which helps to diagnose the vatika type of disorders. Based on these qualities and actions of vata the disease can be classified under the heading of vatavyadhi even though if it has not been specied as vatavyadhi.^[34] As multiple sclerosis cannot be compared to any predescribed condition in Ayurveda it can be considered as anukta vatavyadhi.

Chikitsa

The chikitsa to be based on the cause whether it is due to dhatu kshaya or aavarana.

Dhatu Kshayajanya Vatavyadhi Chikitsa^[35]

- Snehana - bahya - abhyanga, abhyanatara - snehapana
- Snehapoorvaka Swedana - Mashapinda Sweda, Shashtikashali Pinda Sweda, Nadi Sweda, Prastara and Sankara Sweda.
- Mridushodhana - Snigdha Virechana
- Basti - Yapanabasti.
- Nasya - Brimhananasya

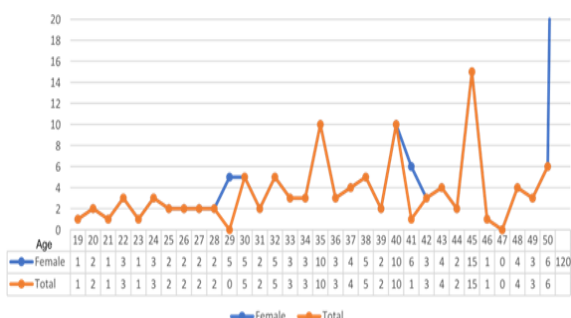
Avaranajanya Vatavyadhi Chikitsa^[36]

Treatment of Avarana should aim towards cleansing the srotas with different medicaments which possess Anabhishtyandi, Snigdha, Kaphapitta Aviruddha and vatanulomana property. Administration of Yapanabasti, Sramsachikitsa and Rasayandravya may be considered after analyzing the bala of patient and the stage of disease. Different varieties of Panchakarma treatments are planned in order to remove the obstruction and bring Vata to its own path.

- Maasthiskya chikitsa - Murdhni Taila i.e. Shirobasti, shiropicchu, shirodhara, shiro abhyanga and Shiro thalam can be adopted.^[37]
- Aushadha Yogas which can used are

Kashaya	Maharasnadi Kashaya
Choorna	Ashwagandha choorna Guduchisatva Amalaki + yastimadhuchoorna
Asava/Arista	Balarista Ashwagandharista Devadarvyarista Dashamoolarista

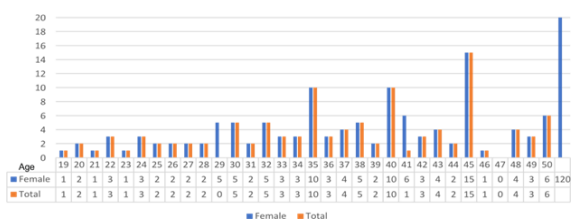
Taila	Mahanarayantaila Ksheerabalataila Dhanwantaramtaila
Ghrita	Ashwagandhadigrita
Rasayana	Ashwagandha rasayana Amalakirasayana



Research

Evidence basis research data^[41]

Developing an Evidence Based Algorithm for Pain Management in Multiple Sclerosis Using Panchakarma Therapy research has been conducted by the Jeewakberg Rehabilitation Centre for the Locomotor Disabled, Ranchi, India for the period of four years on total patients 120 the age of 19-50 years female patients only.



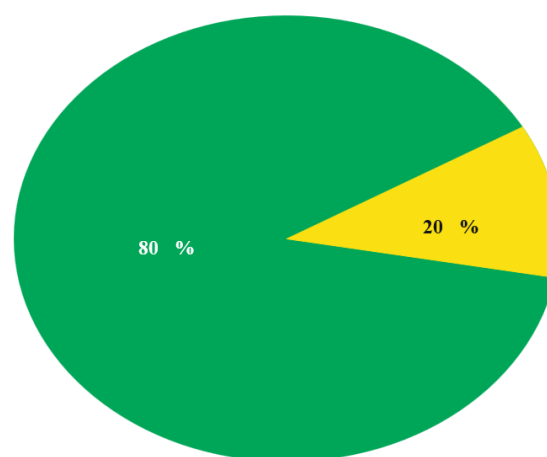
DISCUSSION

Multiple sclerosis is a potentially disabling disease of the central nervous system affecting the Brain, spinal cord and optic nerves. Medications such as steroids, glucocorticoids and Interferons are advised in MS, however the adverse effects such as fluid retention, potassium loss, weight gain and hepatotoxicity are observed. Though there is no definite cure, treatment may relieve the symptoms and are partially effective. Multiple sclerosis is a neurological disease where there will be demyelination taking place. As it is a demyelinating disease it can be correlated to Dhatu Kshayajanya Vata Vyadhi. As it is a Auto immune disorder, the main cause for this can be taken up as Aama in Ayurveda and hence there may be Avarana pathology which may ends up with Dhatu Kshayajanya Vata Vyadhi. Hence it can be considered as Anukta Vata Vyadhi. Different treatment modalities like Shodhana, Shamana and Rasayana can be planned based on Nidana, Avastha and Lakshanas of Vyadhi.

Shodhana improves Kayagni (digestive power and metabolism), cures the disorders, maintains the equilibrium of the Doshas, improves colour, complexion, mind and intelligence. It also improves the vigor and vitality and enables the person to live a long and healthy life. 38 Properly conducted Vamana

removes aggravated Kapha and also makes the body light, improves the functions of sensory organs and clears the channels of chest, flanks and the head region. Properly conducted Virechana, removes aggravated Pitta and clears all channels of body, Jatharagni gets kindled and lightness sets in. Properly performed Basti Karma, establishes proper expulsion of the feces, urine and the flatus, increases appetite, taste and creates euphoria. Properly conducted Nasya Karma removes the aggravated Dosha seated above Urdhva Jatru Pradesha (head and neck), clears the channels of circulation.

Considering all the benefits of the Shodhana it is believed that Shodhana has action over almost all the systems of the body especially gastro-intestinal system, endocrinal system and metabolic activities. It is believed that Shodhana will improve all the waste products of the metabolism and remove the free radicals thus providing a platform from which the whole body rejuvenates. And it is clinically noted that bio-chemicals of the body go towards the normal range after Panchakarma procedure. It is essential to examine the status of Dosha, Bheshaja, Desha, Kala, Bala, Sharir, Ahara, Satmya, Satva, Prakriti Vayaavastha before performing Panchakarma.^[41]



CONCLUSION

Panchakarma is one of the unique contributions to the health of human beings. These modalities of treatments can create wonder if performed judiciously. Success of Panchakarma is dependent on properly performed Purva, Pradhana and Paschat Karma. Panchakarma therapy eliminates the Doshas, eradicates diseases and restores normal strength and complexion and if taken properly, it brings about longevity. The elimination therapies, on the other hand, eradicate diseases completely so much so that they do not recur again unless there are very strong etiological factors, on the contrary they remove the

vitiated Doshas from their very site of origin.³⁹ And it has provide wellbeing to various aspects of health, panchakarma course of treatment is wholesome for the diseased as well healthy, promotes strength, life span and destroys ailments.^[40]

The definite cause of multiple sclerosis is unknown, it can be understood as one among autoimmune diseases and there is no exact treatment protocol in contemporary science. Based on the symptoms it can be correlated to Anukta Vata Vyadhi. By adopting Vata Vyadhi Chikitsa we can able to prevent the further deterioration of condition and improve the quality of life.

RESULT

Developing an Evidence Based Algorithm for Pain Management in Multiple Sclerosis Using Panchakarma Therapy result found satisfactory by non-pharmacology and ayurveda pharmacology with 80%. The 20% found result unsatisfactory in patients those suffering from depression, worried and physical disability with social stigma and addiction of alcohol, tobacco, 41 narcotics.

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