

A DRUG REVIEW ON POTENCY OF NAYURUVI NEI, A HERBO MINERAL SIDDHA DRUG IN THE MANAGEMENT OF VARAL MOOLAM (FIRST-DEGREE INTERNAL HAEMORRHOIDS)**A. Priya¹, H. Vetha Merlin Kumari^{2*}, S. Mohan³ and R. Meenakumari⁴**¹PG Scholar, Department of Maruthuvam, National Institute of Siddha, Chennai-47.²Associate Professor, Department of Maruthuvam, National Institute of Siddha, Chennai-47.³Former Director, Professor, HOD, Department of Maruthuvam, National Institute of Siddha, Chennai-47.⁴Director, National Institute of Siddha, Chennai-47.Article Received on
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Kumari**Associate Professor,
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Institute of Siddha,
Chennai-47.**ABSTRACT**

In Siddha system of medicine, the diseases are classified of the human being into 4448 types on the basics of Mukkutram theory. Haemorrhoids are one of the common anorectal disorders. Haemorrhoids defined as the symptomatic enlargement and distal displacement of anal cushions. The most common symptom of Hemorrhoids is rectal bleeding associated with bowel movement. They affect millions of people around the world and represent a significant medical and socioeconomic problem. Multiple factors have been demanded to be the etiologies of hemorrhoidal development, including Constipation and prolonged straining. The diet and deeds which influence the Vatham and Pitham humour are said to be major causative factors of this disease. Many formulations indicated for Varal Moolam (First-degree Internal Haemorrhoids) in Siddha literature. Nayuruvi Nei is

one among them a Herbo mineral Sastric formulation indicated for Varal Moolam. It learnt that each ingredient of Nayuruvi nei is Posses anti-haemorrhoidal property. Hence this article gives an insight on the efficacy of the drug Nayuruvi Nei on First degree Internal Haemorrhoids based on a review of various literature and scientific studies.

KEYWORDS: Nayuruvi Nei, Herbo Mineral Siddha drug, Varal moolam, Internal Haemorrhoids.

INTRODUCTION

Haemorrhoids arise from congestion of the internal and external venous plexuses around the anal canal. They are extremely common in adults. The aetiology is unknown, although they are associated with Constipation and straining and may develop for the first-time during Pregnancy. First-degree piles bleed, while second degree piles prolapse but retract spontaneously. Third degree piles are those that require manual replacement after prolapsing.^[1]

In India, approximately 40,723,288 people are reported to have haemorrhoids. 1 million new cases are reported annually. It is estimated that 50-85% of people around the world have Haemorrhoids and India 75 % of the population is determined. Current statistics suggest that almost half of the people in their fifties have piles, Haemorrhoids can affect people of any age group or gender.^[2]

In Siddha system, Siddhars classified all the disease into 4448 types. Again this primary classification is regrouped broadly into Vaatham, Pitham, and Kapham. Moolam is considered as one of the essential conditions among their classification. Sage Yugi was the first Siddhar who classified disease based on clinical signs and symptoms along with the humoral pathology. Sage Yugi mentioned 21 types of Moolam in his text Yugi Vaithiya Chinthamani-800. The signs and symptoms of Varl moolam, closely correlated with that of “First degree Internal Haemorrhoids-Bleeding piles” in the modern scientific system of medicine. This disease is mainly due to aggravated Vatha, Pitha humors which are, evident from the quote mentioned below “Anila pitha thonddha malahdu moolam varadhu”-Theraiyar.

In Moola noi, increased keelvaikanal (Abaanan) stimulates Vatha humour which in turn stimulate Pitha humour resulting in Moolam. So the symptoms like Constipation, bleeding during defecation, Pain in umbilical region, Pallor of the body, Headache, Giddiness are developed.

In treatment aspect to suppress vatha humour and Pitha humour, Refrigerant drugs are prescribed to suppress keelvaikanal(Abaanan).^[3] In Siddha literature Agathiyar Vaithiya Valladhi - 600 the pharmaceutical formulation Nayuruvi Nei indicated for Varal Moolam (First Degree Internal Haemorrhoids).^[4] The most of the ingredients of this formulation Posses Anti-inflammatory, Styptic, Anthelmintic and Laxative activities.

MATERIALS AND METHODS

Ingredients and purification of nayuruvi nei

S.NO	NAME OF THE PLANT/MINERAL	USED PART	WEIGHT	PURIFICATION
1	SIVANTHA NAYURUVI <i>Achyranthes aspera.Linn</i>	WHOLE PLANT	16 palam (560grams)	Clean and dry it
2	KODIVELI <i>Plumbago zeylanica.Linn</i>	ROOT BARK	3 kazhanju (15 grams)	Make a fine powder and boiled in milk for three hours and dry it
3	SIVATHAI <i>Operculina turpethum.Linn</i>	ROOT	3 kazhanju (15 grams)	Remove the stem in the middle of root and boiled in milk and dry it
4	SERANGOTTAI <i>Semecarpus anacardium.Linn</i>	FRUIT	3 kazhanju (15 grams)	Projection over the seed is removed and soaked in rice water, Buffalow milk separately for 3 hours.Then wash in water and dry under sunlight
5	AAYIL <i>Chukrasia tabulari, A.Juss</i>	BARK	3 kazhanju (15 grams)	Clean and dry it.
6	CHUKKU <i>Zingiber officinale.Rosc</i>	RHIZOME	3 kazhanju (15 grams)	soak in limestone water for 3 hours & outerlayer will be removed
7	MILAGU <i>Piper nigrum.Linn</i>	FRUIT	3 kazhanju (15 grams)	Soak in buttermilk for 3 hours and dry it
8	THIPPILI <i>Piper longum.Linn</i>	FRUIT	3 kazhanju (15 grams)	Soaked in lemon juice and it was dried in sunlight until the juice gets evaporated.Then it was fried well
9	THANDRI <i>Terminalia bellerica.Roxb</i>	BARK	3 Kazhanju (15 grams)	Clean and dry it
10	MUNNAI <i>Premna integrifolia.Rottl</i>	ROOT	3kazhanju (15 grams)	Clean with Water and dry it
11	KADUKKAI <i>Terminalia chebula.Retz</i>	FRUIT PULP	3 kazhanju (15 grams)	Remove seeds and dry it
12	NELLIKAI <i>Phyllanthus emblica.Linn</i>	FRUIT PULP	3 kazhanju (15 grams)	Remove seeds and dry it
13	THANDRIKAI <i>Terminalia bellerica.Roxb</i>	FRUIT PULP	3 kazhanju (15 grams)	Remove seeds and dry it
14	MUSUTTAI <i>Rivea ornate,Chois</i>	ROOT	3 kazhanju (15 grams)	Clean with Water and dry it
15	VETTI VER <i>Vettiveria zizanioides.Linn</i>	ROOT	3 kazhanju (15 grams)	Clean and dry it
16	PUNGU <i>Pongamia pinnata.Linn</i>	ROOT BARK	3 kazhanju (15 grams)	Clean and dry it
17	SUTHITHA VALAM <i>Croton tiglium.Linn</i>	SEED	3 kazhanju (15 grams)	Boil the seeds in cowdung and break open by removing the skin,boil them pacharisi by tying them in a piece of cloth. Remove the seeds after boiling and wash with water,repeat the process again.next boil the seeds in milk and wash them with water,dry the seeds in shade. fry the seeds in little amount of castor oil.
18	INDHUPPU <i>Sodium chloride impura</i>		3 kazhanju (15 grams)	Mix with Vinegar then filter and dry it

	(ROCK SALT)			
19	PARAI UPPU <i>Black salt</i>		3 kazhanju (15 grams)	Mix with Vinegar and dry it
20	KANJORI <i>Tragia involucrate.Linn</i>	ROOT	3 kazhanju (15 grams)	Clean and dry it
21	PULIYARANAI VERKIZHANGU <i>Cyphostemna setosum.Roxb</i>	ROOT TUBER	3 kazhanju (15 grams)	Clean and remove the outer layer and dry it
22	PIRANDAI <i>Cissus quadrangularis.Linn</i>	ROOT TUBER	3 kazhanju (15 grams)	Clean and remove the outer layer and dry it
23	KASTHOORI MANJAL <i>Curcuma aromatica.Salisb</i>	RHIZOME	3 kazhanju (15 grams)	Remove the outer layer and dry it
24	MARUL <i>Sansevieria roxburghiana. Schult</i>	TUBER	3 kazhanju (15 grams)	Clean and remove the outer layer and dry it
25	KATTU KARUNAI <i>Tacca pinnatifolia, Forst</i>	RHIZOME	3 kazhanju (15 grams)	Clean and remove the outer layer and dry it ^[5]

26. Water-32 padi (41.6 liter)

27. cow's ghee-1 ½ padi (1.960 liter) **28.cow's milk-**4 padi (5.2 liter).

Method of preparation

- Pulverize 16 palam Sivappu Nayuruvi and add 32 padi water and 1 1/2 padi cow's ghee.
- Grind other drugs in an mortar with cow's milk and add it to the above mentioned mixture of milk
- Add 4 padi milk additionally to the mixture and boil for 4 days.
- Remove the mixture from the heat on 5 th day and let it cool

Treatment

Drug : Nayuruvi Nei

Dosage : Irandu Kasedai (1.6 gm) - Morning only

Duration : 48 Days (10 Days medicine 5 days drug holiday without medicine)

Adjuvent : Thiripala Ash

Dosage : Verugadi Alavu(1.5 gm)^[4]

Organoleptic characters, actions and medicinal uses of ingredients of nayuruvi nei

NAME OF THE PLANT	ORGANOLEPTIC CHARECTERS	ACTIONS	MEDICINAL USES
SIVANTHA NAYURUVI	Taste: Bitter, Astringent, Pungent Character: Hot Division: Pungent	Antiperiodic Astringent Diuretic Alterative	<ul style="list-style-type: none"> The leaf juice is useful in stomach ache and bowel complaints, Piles, Boils, Skin eruptions A pinch of the root powder with a pinch of pepper powder and honey is a nice remedy for cough
KODIVELI	Taste: Pungent Character: Hot Division: Pungent	Anti-periodic Diaphoretic	<ul style="list-style-type: none"> Root is used in the treatment of Rheumatism, Paralytic affections, Cronchitis, chronic and intermittent fever Leprosy, Leukoderma, Anemia, Syphilis.
SIVATHAI	Taste: Bitter Character: Hot Division: Pungent	Purgative	<ul style="list-style-type: none"> Mix Equal Amount of the Purified powder of the Root of Sivathai and the Powder of Rock Salt, eat about 2 to 4 Grams With warm water. They will induced Loose Motion. This is good for Haemorrhoids, Epilepsy and Paralysis, Myalgia, Bronchitis, Leucoderma, Dropsy, Ulcers, J aundice,
SERANKOTTAI	Taste: Bitter Character: Hot Division: Pungent	Carminative Tonic Aphrodisiac	<ul style="list-style-type: none"> The fruit is used to Stomatitis, Weakness and Paralysis, Expels bad humours from the body- The pulp is tonic, good for Piles. The smoke from the burning pericarp is good for tumours Good for leucoderma, Epilepsy and other nervous Diseases, Lesions inflammation Useful in paralysis and superficial pain.
AAYIL		Febrifuge	<ul style="list-style-type: none"> Bark extract has powerful astringent. properties and treat diarrhea.
CHUKKU	Taste: Pungent Character: Hot Division: Pungent	Stimulant Stomachic Carminative	<ul style="list-style-type: none"> Increase gastro intestinal motility Inhibition of Prostaglandin synthesis Treating motion sickness.
MILAGU	Taste: Bitter, Pungent Character: Hot Division: Pungent	Carminative Antiperiodic Resolvent Stimulant Antidote, Antivatha	<ul style="list-style-type: none"> Milagu is indicated for Anaemia, Dysentery, Ulcer, Fever, Vadha diseases, Haemorrhoids
THIPPILI	Taste: Pungent Character: Hot Division: Sweet	Root: Thermogenic Tonic Stomachic digestive, Anthelmintic expectorant. Fruit: Pungent, Stomachic Carminative	<p>Root:</p> <ul style="list-style-type: none"> Used for the diseases of respiratory tract viz. cough, bronchitis, asthma. Counter irritant and analgesic when applied locally for muscular pain. As cholagogue in obstruction of bile duct and gall bladder. <p>Fruit:</p> <ul style="list-style-type: none"> Fruit is used in palsy, gout and lumbago. It cures cough, ulcer, bronchial asthma, <i>kapha</i> diseases, anaemia, headache, delirium, sinusitis and

			throat pain. It is reported as good remedy for treating gonorrhea, menstrual pain, <ul style="list-style-type: none"> • Tuberculosis, Sleep disturbances, Respiratory tract infections, Chronic gut-related pain and Arthritic conditions.
THANDRI	Taste: Astringent Character: Hot Division: Sweet	Astringent, Laxative Tonic Expectorant	<ul style="list-style-type: none"> • It cures the disease of Vatha and Pitha and neutralizes thress doshas. • It is useful to induced appetite and relieve abdominal flatulence • It boosts the immunity and enhances the body resistance against the disease.
MUNNAI	Taste: Astringent, Bitter Character: Hot Division: Pungent	Stomachic Carminative Alterative Tonic	<ul style="list-style-type: none"> • Roots cure cough Asthma, Bronchitis, Skin disorders, Constipation, Liver disorders • Leaves are good external application to Piles and Tumors • Plant is used in the form of decoction in Rheumatism and Neuralgia
KADUKKAI	Taste: Mainly Astringent, Small amount of sweet, Sour, Pungent, Bitter Character: Hot Division: Sweet	Stomachic Carminative Expectorant Anthelmintic	<ul style="list-style-type: none"> • Kadukai is useful in vitiated conditions of Tridosha, Wound ulcers, Inflammations, Gastropathy, Anorexia, Flatulence • Haemorrhoids • Jaundice, Hepatopathy, Spleenopathy, • Pharyngodysnia, Hiccough, Cough • Uropathy, Vesical and renal calculi, Cephalgia, Epilepsy/ • Ophthalmopathy, Skin diseases, Leprosy, Intermittent fever, Cardiac disorders, Stomatitis, Neuropathy and general debility.
NELLIKAI	Taste: Sour, Astringent, Sweet Character: cold Division: Sweet	Astringent Refrigerant Laxative Diuretic	<ul style="list-style-type: none"> • Bark and fruits are used in Diarrhea and Dysentery. • Juice relieves pain in urine trouble. • Decotion of the fruit is taken to increase blood count.
MUSUTTAI	Taste: Bitter, Pungent Character: Hot Division: Pungent	Germicide Anti Vatha Laxative	<ul style="list-style-type: none"> • It is used in Haemorrhagic disease and piles • The leaves are given after parturition
VETTI VER	Taste: Sweet Character: Cold Division: Sweet	Tonic Stimulant Anti- spasmodic Emmenagogue Febrifuge	<ul style="list-style-type: none"> • It cures Hypertension, Excessive thirst, Fever, Jaundice.
PUNGU	Taste: Bitter, Astringent Character: Hot Division: Pungent	Astringent Alterative Parasiticide Antiseptic Stimulant	<ul style="list-style-type: none"> • Pongamia useful in inflammation, Chronic fevers, Anaemia and Haemorrhoids • Powdered seed is used in Bronchitis, chronic fever, whooping cough and chronic skin disease and painful rheumatic diseases
SUTHITHA VALAM	Taste: Bitter Character: Hot	Purgative, Rubefacient	<ul style="list-style-type: none"> • Minimal dose is given with fresh ginger tea to children in whooping cough Chronic

	Division: Pungent		<p>rheumatism.</p> <ul style="list-style-type: none"> A mixture consisting of part of the croton oil to 8 parts of coconut oil will form a suitable liniment
KANJORI	Taste: Bitter Character: Hot Division: Pungent	Diaphoretic	<ul style="list-style-type: none"> It is used to treat Wounds, Eczema, Scabies and Skin infections It has also been found to be effective in treating Pain and Bronchitis
PULIYARANAI VERKIZHANGU	Taste: Pungent, Astringent Character: Hot Division: Pungent	Acrid Astringent	<ul style="list-style-type: none"> It is used to treat Eczema, Piles, Azhipun Lingam and Copper purified by this tuber This leaves are applied to ulcers to promote suppuration and to assist in the extraction of Guinea worms.
PIRANDAI	Taste: Pungent Character: Hot Division: Pungent	Alterative Emmenagogue Stomachic	<ul style="list-style-type: none"> The Extract from stem of this plant have used widely for the early repair of fractures, Gout, back pain and irregular Menstruation.
KASTHOORI MANJAL	Taste: Bitter Character: Hot Division: Pungent	Tonic Stimulant Carminative	<ul style="list-style-type: none"> The tubers are applied externally in combination with astringents, Bitter sand aromatics, to bruises and sprains, They are also used in skin eruption and infection and to improve the complexion Rhizome paste/powder is used externally in leucoderma, Scabies and small pox. It is useful in blood disorders and intestinal Tumours
MARUL	Taste: Pungent, Sweet Character: Hot Division: Pungent	Purgative Tonic Stimulant	<ul style="list-style-type: none"> A good quality fibre is obtained from the leaves the fibre is soft and silky The fibre is used for the preparation of cordage.
KATTU KARUNAI	Taste: Pachayil karakarappu Character: Hot Division: Pungent	Stomachic Rubefacient	<ul style="list-style-type: none"> It is used in Piles, Fever, Eczema^[6]

Pharmacological actions and phytochemical constituents of ingredients of nayuruvi nei.

NAME OF THE PLANT	PHARMACOLOGICAL ACTIVITY	PHYTOCHEMICAL CONSTITUENTS
SIVANTHA NAYURUVI	Anti inflammatory Activity Analgesic Activity Wound Healing Activity Antiviral Activity Anticarcinogenic Activity Antioxidant Activity Hepatoprotective Activity	Ecdysterone, ecdysone, Eugenol, 20-hydroxy -ecdysone, Nerol, Spathuenol Betaine, Tritriacontane, hexa triacontane, Hydroquinone, Asarone n-hexacos-14-enoic acid Achyranthine, Hentriacontane Achyranthes, saponins A, B, C, D Oleanolic acid ^[7]
KODIVELI	Anti-inflammatory activity Anti-tumour activity Anticancer activity Analgesic activity Antipyretic activity	Plumbagin, 3-chloroplumbagin, 2-methylnaphthazarin Flowers: 3-Rhanmnosides of pelargonidin, Cyanidin and Delphinidin and Kaempferol Root: Arachidyl alcohol, 2-methyl 5-hydroxy-1, 4-naphthoquinone. Root bark : β sitosterol, Sitosterone, Stigmasterol α -naphthoquinone and α - naphthylamine isolated from the

		root Linoleic acid, Palmitic acid Lupeol, Saponaretin, Isoorientin, Uridine, Psoralen, Seselin, 3'- Biplumbagin, 3- chloroplumbagin, Zeylinone, plumbagic acid, 4-naphthoguinone ^[8]
SIVATHAI	Anti inflammatory activity Antimicrobial activity Antiseptic activity Antinephrotoxic activity Anti tumour activity Analgesic activity Cytotoxic activity Antidiarrheal activity	Turpethinic acids(A, B, C, D and E) α -turpethin and β -turpethin α and β -rhamnose β -sitosterol Betulin scopoletin Jalapinolic acid Operculinolic acid Palmitic acid 3-12-dihydroxy and palmitic acid 4-12-dihydroxy ^[9]
SERANGOTTAI	Anti inflammatory activity Anti-carcinogenic activity Analgesic activity Antioxidant activity Antimicrobial activity Neuroprotective effect	Bhilwanol, anacardol, Semicarpol phenolic compounds, bioflavonoids 1, 2, dihydroxy -3(pentadecadienyl 8, 11) benzene and 1, 2, hydroxy -3 (pentadecadienyl 8) benzene Anacardoflavanone, anacardoside Monolefin I, diolefin II Semecarpetin, nallaflavanone O-trimethyl biflavanone A1, A2 Linoleic acid, Stearic acid ^[10]
AAYIL	Antibacterial Activity Antifungal Activity Anti Oxidant Activity Biopesticidal Activity	Quercetin 7 Dimethoxycoumarin, Scopoletin Tannic Acid Tabulalin Tabulalide A, B, C, D, E Mellanone Phragmalin 3, 30 Diisobutyrate ^[11]
CHUKKU	Anti inflammatory Anti pyretic activity Analgesic activity Anti oxidant activity Anti hyperlipidemic activity Anti-spasmodic activity Anti-emetic activity Anti-tumorigenic activity	6-gingerol 6-shagaol, beta phellandrene, genaniol glycosides 6-gingesulfonic acid, ar-curcumen, beta -bisabolene, genniol glycosides, Camphene, alpha zingiberine, Cineol and Borneol 6-gingesulfonic acid, Hexahydrocurcumin, isogingerenone β sesquiphellandrene, Gingerdiols Gingerglycolipids A, B & C ^[12]
MILAGU	Anti inflammatory Antioxidant activity Antipyretic activity Analgesic activity Antispasmodic Anticancer activity Antitumor activity	Piperine, Piperonylamine, Pipericide, Sarmentosine, Sarmentine, Chavicine Piperettine Piperamides Piperylin A, Piperolein B, Pipericine Guineensine, Eugenol, Myristicine, Safrol, Sarmentine ^[13]
THIPPILI	Anti inflammatory Antioxidant activity Anticancer activity Immunomodulatory Insecticidal activity Antifungal activity Anti-amoebic activity	Piperine, piperettine, asarinine, piperlongumine, Pellitorine. iperonaline, sylvatin, sesamin, Pipermonaline Piperundecalidine, guineensine, pulvatiol, fargesin Trimehoxy cinnamoyl -piperidine, tridecyl- dihydro-pcoumarate, thujone, terpinolene, p- cymene, dihydrocarveol Palmitic acid, tetrahydropiperic acid ^[14]
THANDRIKKAI & PATTAI	Anti inflammatory Analgesic activity Wound healing activity Immunomodulatory Anticancer activity Antispasmodic activity Antimicrobial activity	Belleric acid, arjungenin, luteoline β sitosterol, Palmitooleolinolein, stearo- oleolinolein, palmitodiolein, dioleolinolein, triolein Phyllemblin, Q uercetine and kampferol Bellericoside, bellericanin Ethyl gallate, galloyl glucose Gallic acid, Ellagic acid, Chebulagic acid, hexahydroxydiphenic acid ester, ethyl gallate, methyl galleate ^[15]
MUNNAI	Anti inflammatory activity Analgesic activity Anti-microbial activity Immunomodulatory Anti cancer activity Hypoglycemic activity Hepato protectivactivity Anti oxidant activity	p-methoxy cinnamic acid, β sitosterol, ganiarine, ganikarine linalool, linoleic acid, flavone luteolin, glycerin, premnine, ganiarine, premnazole pentacyclic terpene betulin premna spirodiene, premnenol, cleodendrin- A, caryophellen aphelandrine ^[16]

KADUKKAI	Wound healing Activity Anticancerous Activity Antidiabetic activity Anti bacterial activity Antioxidant Antidysentery activity	Arunglucosie I, Axjungenin, Punicalagin, Telflavin A terchebin Chebulin from flowers, Palmitic, Stearic, Oleic, Linoleic, Arachidic and Behenicacids from fruit kernels. Fruits contain about 30% of an astringent substance. Astrigency due to the characteristic principle chebulinic acid. Also contains Tannic acid 20-40%, Gallic acid, Chebulagic acid, resin and a purgative glycoside of anthraquinone derivative Chebulin exhibited antispasmodic action on smooth muscle similar to papaverine ^[17]
NELLIKAI	Anti inflammatory activity Analgesic activity Anti microbial activity Anticancer activity Antibacterial activity Anti tumour activity Antioxidant activity	Ascorpic acid, EmblicaninA, and B B carotene, β sitosterol, Ellagic Acid, D-galacturonic acid, Punigluconin Pedunculagin Chebulinic Acid, Phyllantine, Phyllembin, Phyllantidine Lupenone, Zeatin, Gallic Acid, Methyl Gallate, Aspartic acid, Alanine, Cystine Quercetin, Kaempferol aectin ^[18]
MUSUTTAI	Anti inflammatory activity Anti oxidant activity	Phenol and tannins, Phytosterols and triterpenoids, Flavonoid, Saponin, 12, 13-epoxy -octadec-cis-9-enoic acid, Palmitic acid, Stearic acid, Oleic acid, Linoleic acid ^[19]
VETTI VER	Anti inflammatory activity Antifungal activity Antimicrobial activity Antioxidant activity	Vetivene, vetivone, vetivenate, vetiverol, Calacorene, khositone, terpenes, Khusimone, khusi mol, iso-khusimol, Valencene, Epizizianal, diisooctyl ester, Benzoic acid Valerenol ^[20]
PUNGU	Antiulcer activity Antiinflammatory activity Anti plasmodial activity Antioxidant activity Anti bacterial activity Antiviral activity Anti diarrhoeal activity	Oleic acid, Stearic acid and Palmitic acid, Karanjin, Kanjone Quercetin, galbone, pongalabol, pongagallone A and B Glabrachromene II, Pongaglabrone Pongamol, pongamin, pongone, pongapin, pinnatin Glabrin, β hydroxy chalcones ^[21]
SUTHITHA VALAM	Anti inflammatory activity Antioxidant activity Antitumor activity Anti HIV activity Antidermatophytic activity Antifungal activity Cytotoxic activity	Crotonoleic acid, cleodane, tigliance, kaurene, crotofolane, labdane, Glyceryl crotonate, crotogossamide, Pernambucone, Musiduol, Musidunin Crotonic acid, crotoncaudatin, lobaceride Carcinogenic Phorbol derivatives ^[22]
KANJORI	Wound healing activity Anti-inflammatory activity Analgesic activity Antidiabetic activity Antioxidant activity Anticancer activity Anti microbial activity Antiepileptic activity	Alkaloids and sterols, Iridin, Dihexosyl quercetin Quercetin 3-o-rutinoside, Coumarins, Flavonoids Terpenoids ^[23]
PULIYARANAI VERKIZHANGU	Antispasmodic activity Anti inflammatory activity Anti hypertensive Anti ulcer activity Anti microbial activity	Carotenoids, Triterpenoids, Ascorbic acid, n-hexadecanoic acid, 9, 12, 15-octadecatrienoic acid, T-tocopherol ^[24]
PIRANDAI	Antioxidant activity Anti inflammatory Anti tumour activity Anti bacterial activity Analgesic activity Anti viral activity	Quercetin, Quadrangularin, Calcium oxalate, α and β amyryns, β sitosterol, Kaempferol, Resveratrol, Pallidol, Piceatannol Parthenocissus, Carotene, 31 methyl triacotanoic acid taraxeryl acetate, taxaxerol, iso pentadecanoic acid(25)

	Antiobesity activity	
KASTHOORI MANJAL	Anti inflammatory Anti oxidant Wound healing property Anti bacterial activity Anti cancerous activity	Alpha, beta pinene Alpha phellandrene, curdione, neocurdione 1, 2 hexadecanediol, 7 methanoazulene, 1, 8 cineole, p cymene 2-oxabicyclo octane 1, 4-dimethyl-8- methylene, p-cymen-8-ol, L -carveol, Camphor, camphene, Zederone Zingiberene, curzerenone, germacrone, curcumeone ^[26]
MARUL	Analgesic activity, Antioxidant activity Anticancer activity Antibacterial activity Antitumor activity	Sansivierine, Palmitic acid, Phthalate Delta undecalactone, N- hexadecanoic acid Pentadecanone, Methyl hexadecanoate ^[27]
KATTU KARUNAI	Antioxidant activity Anti inflammatory activity	Alkaloids, phenols, Steroidals, diarylheptanoids, phenolics, Sesquiterpenoids, triterpenoids Tannins, Steroids, Flavanoids, Glycosides, Volatile oil, Saponins Vitamin C, Vitamin E ^[28]

Minerals

Rock salt (sodium chloride impura)

Synonyms

Saindhavam, Mindhasol, Chandhiranuppu, Madhiuppu, Madhikoormai, Sindhooram.

Organoleptic characters

Taste: Salt **Character:** Hot **Division:** Pungent.

Action

- Stomachic
- Laxative
- Carminative
- Diuretic

Medicinal uses

- Lymphadenitis, Liver disorder, Eight types of gastric ulcer, Indigestion Distended Abdomen,
- Retention of urine will be cured, Appetite will be increased.^[29]

Black salt -parai uppu

Synonyms: Kadarkuruvi, Kalluppu, Black salt is a type of Rocksalt. It is also known as Himalayas black salt.

Characters

- The condiment is composed largely of sodium chloride with several other components lending

the salt its colour and smell. The smell is due to its sulfur content. Because if the presence of iron sulfide it forms brownish pink to dark violet translucent crystals when whole and when ground into a powder it is light purple to pink in colour

- It consist primary of Sodium chloride and trace impurities of Sodium sulphate, Sodium bisulphate, Sodium sulfide, Iron sulphide and hudiogen sulfide.^[30]

Medicinal uses

- It cures Constipation, Ulcer, Vatha disease, Tasteless.
- Vomitting, Thirst, Pitha and kapha diseases.

Cow's ghee-pasu nei

Synonyms

Aavin nei Ko nei Thuppu

Medicinal uses

- Cow's ghee is used for excess thirst, Pitha diseases, Vomiting, Poisons, Ulcer, Sexually-transmitted diseases, Hiccough, cough, Burning sensation of stomach, Bone diseases, Piles. (29)

Pharmacological activity

- Anti inflammatory Activity
- Anti viral Activity
- Antioxidant Activity

Phytochemical constituents

- It contains approximately 8% saturated fatty acids which make it easily digestible.
- The digestibility coefficient or the rate of absorption is 96% which is better than any other animal or vegetable fat.
- It contains triglycerides, di-glycerides, mono-glycerides, phospholipids, beta carotene 600IU and vitamin E which are known anti-oxidants

Uses

- Cow's ghee reduces Pitha and Kabha
- Ghee is rich in the oil soluble Vitamin A&E
- Ghee stimulates the secretion of gastric acid, thus aiding in the digestive process. So it is excellent in increasing appetite

- It detoxifies the body
- It strengthens immune system and vitality
- Ghee is used as a carrier for herbs and bhasmas because of its supreme penetrating qualities and the ability to carry the substances deep into dhathus or tissues.
- Ghee is rich which antioxidants and act as an aid in the absorption of vitamins and minerals from other food, serving to strengthening the immune system.
- It cures Constipation
- Ghee is used preferentially for diseases caused by Pithadosha.^[31]

Cow's milk synonyms: Payam, Keeram, Kadhai, Paagu, Amudhu, Thutham, Payasu^[29]

Nutrients in milk

- Eighty percent of the protein fraction cow's milk is caesins, which predominately contain glutamic acid, Proline, arginine and branched amino acids(leucine, isoleucine, valine).
- Soluble whey proteins rich in cysteine, lyseine, leucine and tryptophan account for the 20% of milk proteins.
- Milk proteins are of high biological value, both because they contain all the essential aminoacids required by the human body, and because of their high digestibility and bioavailability.
- Milk provides a variety of minerals, in particular calcium and phosphorus but also potassium, magnesium, selenium and Calcium.^[32]

CONCLUSION

Based on various Siddha texts review, the ingredients of Nayuruvi Nei are common drugs used in treating Haemorrhoids, Vatha and Pitha diseases. In view of the above mentioned pharmacological activities, most ingredients are found to possess Anti inflammatory, Astringent., Analgesic, Laxative and Demulcent activity along with Antioxidant. So it can be decided that the formulation will be helpful in the management of Varal moolam (First degree Internal Haemorrhoids.). The ghee acts as a carrier of nutrients to be absorbed across the cell membrane. Thus the potency and efficiency of a drug is further enhanced. With this proven efficacy, the drug is easily available to prepare cost efficacy and safer treatment for first degree internal Haemorrhoids. Further clinical studies and statistical data analysis help in exploring this herbal Siddha formulation.

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