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SCAN ME

Case Report

EFFECTIVENESS OF SIDDHA PURGATIVE THERAPY AND VARMAM IN THE MANAGEMENT OF *THANDAGA VATHAM* (LUMBAR SPONDYLOSIS)

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Abstract

Back Ground: *Thandaga Vatham* is one of the *Vatha* diseases mentioned in the Siddha literature *Yugi Vaithiya Cindamani*. The clinical features of *Thandaga Vatham* may be correlated with lumbar spondylosis in modern medicine. Purgation is given to neutralize the *Vatham* humour. This single case study was carried out to validate the efficacy of purgative therapy followed by *Varmam* therapy in a particular *Vatha* disease. **Aim and Objective:** To present our experience with Siddha Purgative therapy and *varmam* on a patient with low back pain. **Materials and Methods:** A 55 year old male reported with the complaints of pain in lumbar region with radiating pain over the buttock and both lower limbs. Diagnosis was confirmed after clinical assessments and by imaging techniques. Then the patient was subjected to the treatment with *Agathiyar kuzhambu* and *varmam*. No other supportive therapies had given. **Result**: After 21 days of treatment, the patient had shown considerable symptomatic relief i.e.The pain of the lumbar region and both lower limbs markedly reduced. The intensity of pain was assessed by Aberdeen low back pain scale before and after treatment.

Key words: Aberdeen low back pain scale, *Agathiyar Kuzhambu*, Lumbar spondylosis, Siddha purgative therapy, *Thandaga Vatham, Varmam*.

INTRODUCTION

Thandaga Vatham is one among 80 *Vatha* diseases mentioned by sage *Yugi* in his textbook *Yugi Vaithiya Cindhamani* [1]. The signs and symptoms of *Thandaga Vatham* may be correlated with the lumbar spondylosis in modern science. Lumbar spondylosis is a degenerative disease which affects the lower spine. In lumbar spondylosis, there is

narrowing of the space between the vertebrae, causing a variety of health problems ranging from back pain to neurological issues.

Low back pain (LBP) affects approximately 60–85% of adults during some point of their life time. For the large majority of individuals, symptoms are mild and transient, with 90% subsiding within 6 weeks. Chronic low back pain, defined as pain symptoms persisting more than 3 months, affects an estimated 15–45% of the population.[2] Nowadays the pain management for lumbar spondylosis is only by NSAIDS. The side effects of intake of NSAIDs for prolonged period are well known. So, there is in need of a cost-effective remedy without side effects.

Siddha system of medicine is an ancient, unique indigenous system of medicine. It was formulated and established by *Siddhars* who are the spiritual scientists of the ancient Tamil culture about more than several thousand years back. The Siddha system has not only the curative and preventive effects on diseases but also paves the way for longevity and immortality. As per the Siddha system of medicines, disease is caused by vitiation of three humours i.e. *Vatham, Pitham* and *Kabam*. The treatment is carried out to balance the vitiated humours. Purgative therapy is administered to equalize the vitiated *Vatham* humour. *Varmam* therapy is one of the external therapies applied especially for pain management in the treatment of neuromuscular diseases and joint disorders. In order to give a safe and effective treatment using purgation as well as *varmam* therapy, this single case study has been carried out.

CASE REPORT

A 55 years old male from New Delhi, who was working as a guard in Safdarjung Hospital, New Delhi reported to the Siddha Clinical Research Unit, Safdarjung Hospital, New Delhi on dated 25.12.2020 with chief complaints of pain in lumbar region with radiating pain over the buttock and both lower limbs since 3 years. The pain had worsened with upright stance and walking, and improve with sitting and supine positioning. The pain also increased on prolonged sitting posture and stair case activities. As the patient was working as a guard he was mentally stressed because of not performing his duties well.

Medical history:

The patient was previously treated with NSAIDs for 7 months with frequent intervals (from May 2020 to November 2020).

Socio economic status:

The patient from middle-income group and is residing in New Delhi.

Marital status: Married

Personal history: Patient was having the mixed diet. He was of normal built. He was non-smoker and non-alcoholic.

Co-morbid conditions:

He was not a known case of diabetes mellitus, hypertension, hyperlipidemia. There was no history of trauma, seizures, ischemic heart diseases etc.

General examination

Table : 1 General Examination of the patient

Pulse rate	74/min.
Heart rate	74/min
Respiratory rate	18/min
Blood pressure	130/80 mm Hg
Pallor	Nil
Jaundice	Nil
Cyanosis	Nil
Lymphadenopathy	Nil
Pedal edema	Nil
Clubbing	Nil
Jugular venous pulsation	Not visible

Siddha Diagnostic Tool: Before Treatment

***En Vagai Thervu* (Eight Fold Examination)**

Naadi (Pulse) : *Vatha Pitham*

Sparisam (Touch) : *Mitha Veppam*

Naa (Tongue) : Coated

Niram (Complexion) : Normal

Mozhi (Voice) : *Sama oli*

Vizhi (Eyes) : Normal

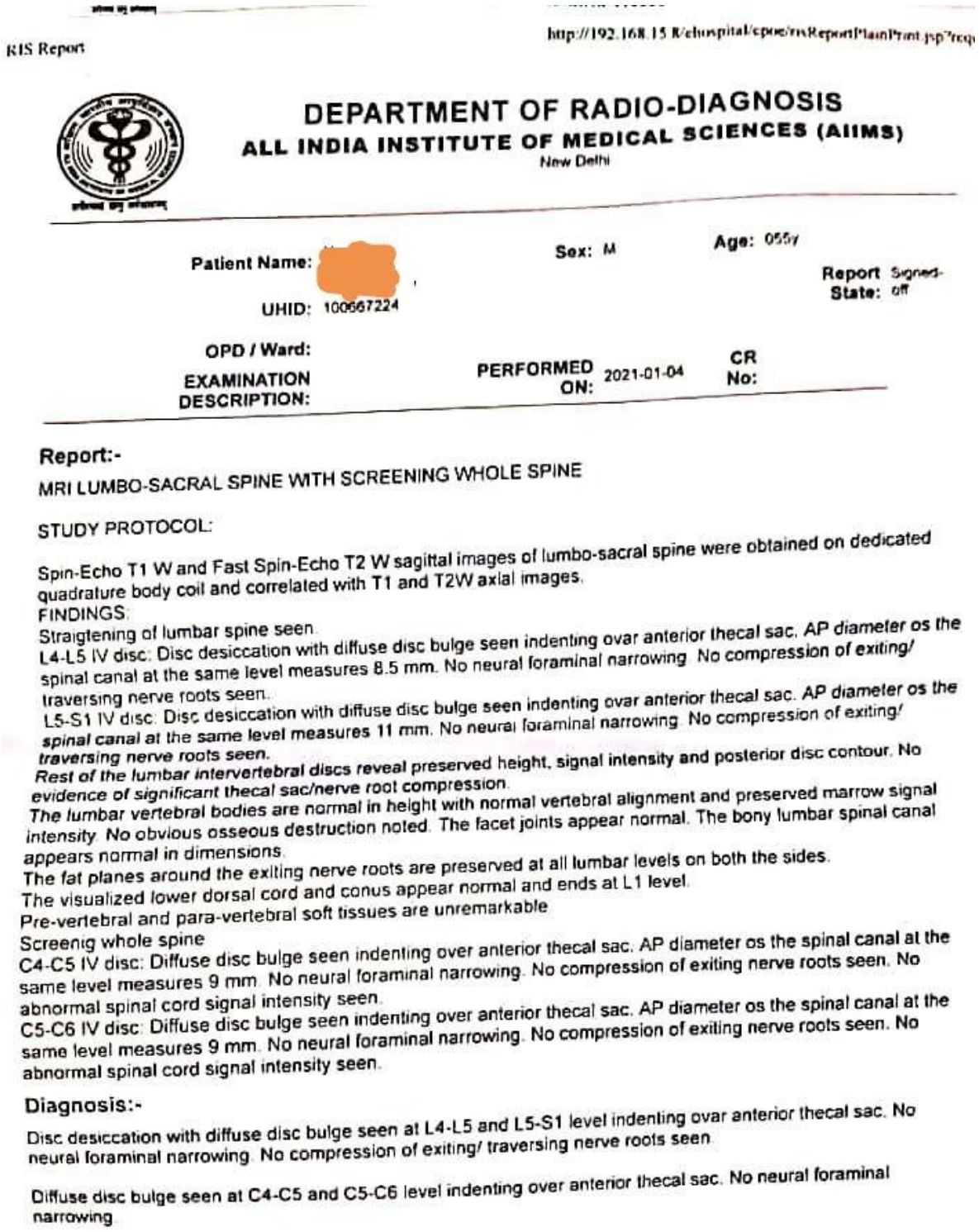
Malam (Stool) : Constipation present

Moothiram (Urine) : Normal. 5-6 times/day

Nei kuri (Oil drop test in urine) : *Vatham* (Fastly spreaded with irregular margins)

Diagnosis:

The diagnosis is also made by the MRI – Lumbo Sacral Spine which was done at All India Institute of Medical Sciences, New Delhi dated 04/01/2021. Shown in the following picture.



RIS Report http://192.168.15.8/elhospital/cpoe/risReportPlainPrint.jsp?req

DEPARTMENT OF RADIO-DIAGNOSIS
ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS)
New Delhi

Patient Name: [redacted] Sex: M Age: 055y
UHID: 100667224 Report State: Signed-off
OPD / Ward:
EXAMINATION DESCRIPTION: PERFORMED ON: 2021-01-04 CR No:

Report:-

MRI LUMBO-SACRAL SPINE WITH SCREENING WHOLE SPINE

STUDY PROTOCOL:

Spin-Echo T1 W and Fast Spin-Echo T2 W sagittal images of lumbo-sacral spine were obtained on dedicated quadrature body coil and correlated with T1 and T2W axial images.

FINDINGS:

Straigtening of lumbar spine seen.
L4-L5 IV disc: Disc desiccation with diffuse disc bulge seen indenting ovar anterior thecal sac. AP diameter os the spinal canal at the same level measures 8.5 mm. No neural foraminal narrowing. No compression of exiting/ traversing nerve roots seen.
L5-S1 IV disc: Disc desiccation with diffuse disc bulge seen indenting ovar anterior thecal sac. AP diameter os the spinal canal at the same level measures 11 mm. No neural foraminal narrowing. No compression of exiting/ traversing nerve roots seen.
Rest of the lumbar intervertebral discs reveal preserved height, signal intensity and posterior disc contour. No evidence of significant thecal sac/nerve root compression.
The lumbar vertebral bodies are normal in height with normal vertebral alignment and preserved marrow signal intensity. No obvious osseous destruction noted. The facet joints appear normal. The bony lumbar spinal canal appears normal in dimensions.
The fat planes around the exiting nerve roots are preserved at all lumbar levels on both the sides.
The visualized lower dorsal cord and conus appear normal and ends at L1 level.
Pre-vertebral and para-vertebral soft tissues are unremarkable
Screenig whole spine
C4-C5 IV disc: Diffuse disc bulge seen indenting over anterior thecal sac. AP diameter os the spinal canal at the same level measures 9 mm. No neural foraminal narrowing. No compression of exiting nerve roots seen. No abnormal spinal cord signal intensity seen.
C5-C6 IV disc: Diffuse disc bulge seen indenting over anterior thecal sac. AP diameter os the spinal canal at the same level measures 9 mm. No neural foraminal narrowing. No compression of exiting nerve roots seen. No abnormal spinal cord signal intensity seen.

Diagnosis:-

Disc desiccation with diffuse disc bulge seen at L4-L5 and L5-S1 level indenting ovar anterior thecal sac. No neural foraminal narrowing. No compression of exiting/ traversing nerve roots seen.

Diffuse disc bulge seen at C4-C5 and C5-C6 level indenting over anterior thecal sac. No neural foraminal narrowing.

Treatment:

Table : 2 Internal medicine [3]

S. No	Siddha Medicine	Dosage and adjuvant	Time of administration	Treatment Period
1.	*Agathiyar kuzhambu*	200mg with Ginger Juice	early morning	3 days

External Therapy:

Varmam Therapy

The following *varmam* points were given after purgation, once in two days for totally 21 days

1. *Manipooraga adangal*
2. *Naanganaa puttu varmam*
3. *Komberi kaalam*
4. *Viruthi Kaalam*
5. *Ullangaal Vellai varmam*

Table : 3 Location of *varmam* point and manipulation technique [4]

Varmam Name	Location	Procedure
Manipooraga Adangal	Five Fingerbreadths below the umbilicus	Place the tip of the middle three fingers transversely on the point; Gently press and lift upwards
Naanganaa Puttu Varmam	Sacral groove, three fingerbreadths from the lumbosacral junction (region)	Place the middle part of the thumb at the point described 1 Provide 3 rounds of external rotation at the sacral groove. 2 Glide laterally to reach anterior superior iliac spine. 3 Finally give clockwise rotation using 3 fingers on anterior superior iliac spine.
Komberi Kaalam	Eight fingers above the medial malleolus	Place the tip of the middle three fingers over the point. Press times (in pumping motion) towards medial border of tibia.
Viruthi Kaalam	Junction of web of great toe and second toe in dorsal aspect	Press with the center portion (pulp) of the thumb over the point on both sides. Sustain the pressure on the point for 10 seconds.
Ullangaal Vellai Varmam	At the junction of big and second toe in plantar region	Place the Central part (pulp) of the thumb over the *varmam* point and then press and release

Assessment

Pain intensity was assessed by Aberdeen low back ache scale.

Table 3: Aberdeen low back ache scale [5]

Question	Response	Points
In the past 2 weeks how many days did you suffer pain in the back or leg(s)?	None at all	0
	between1and5days	1
	between6and10days	2
	formorethan10days	3
On the worst day during the past 2weeks how many painkilling tablets did you take?	None at all	0
	Less than 4 tablets	1
	Between 4 and 8 tablets	2
	Between 9 and 12 tablets	3
	More than 12 tablets	4
Is the pain made worse by any of the following?	Coughing	+1
	Sneezing	+1
	Sitting	+1
	Standing	+1
	Bending	+1
	Walking	+1
Do any of the following movements ease the pain?	Lying down	+1
	Sitting down	+1
	Standing	+1
	Walking	+1
In your right leg do you have any pain in the following areas?	Pain in the buttock	+1
	Pain in the thigh	+1
	Pain in the shin or calf	+1
	Pain in the foot or ankle	+1

In your left leg do you have any pain in the following areas?	Pain in the buttock	+1
	Pain in the thigh	+1
	Pain in the shin or calf	+1
	Pain in the foot or ankle	+1
Do you have any loss of feeling in your legs?	No	0
	Yes just one leg	1
	Yes both legs	2
In your right leg do you have any weakness or loss of power in the following areas?	Hip	+1
	Knee	+1
	Ankle	+1
	Foot	+1
In your left leg do you have any weakness or loss of power in the following areas?	Hip	+1
	Knee	+1
	Ankle	+1
	Foot	+1
If you were to try and bend forward without bending your knees how far down do you think you could bend before the pain stopped you?	I could touch the floor.	0
	I could touch my ankles with the tips of my fingers.	1
	I could touch my knees with the tips of my fingers.	2
	I could touch my mid thighs with the tips of my fingers.	3
	I couldn't bend forward at all.	4
On the worst night during the last 2weeks how badly was your sleep affected by the pain?	Not affected at all	0
	I didn't lose any sleep but needed tablets	1

	It prevented me from sleeping but I slept for more than 4 hours	2
	I only had 2-4 hours of sleep	3
	I had less than 2 hours of sleep	4
On the worst day during the last 2weeks did the pain interfere with your ability to sit down?	I was able to sit in any chair for as long as I liked	0
	I could only sit in my favorite chair as long as I liked	1
	Pain prevented me from sitting more than 1 hour	2
	Pain prevented me from sitting more than 30 minutes	3
	Pain prevented me from sitting more than 15 minutes	4
	Pain prevented me from sitting at all	5
On the worst day during the last 2weeks did the pain interfere with your ability to stand?	I could stand as long as I wanted without extra pain	0
	I could stand as long as I wanted but it gave me extra pain	1
	pain prevented me from standing more than 1 hour	2
	pain prevented me from standing more than 30 minutes	3
	pain prevented me from standing more than 15 minutes	4
	pain prevented me from standing at all	5
On the worst day during the last 2weeks did the pain interfere with your ability to walk?	Pain did not prevent me walking any distance	0
	Pain prevents me walking more than 1 mile	1
	Pain prevents me walking more than ½ mile	2
	Pain prevents me walking more than ¼ mile	3
	I can walk but less than ¼ mile	4
	I was unable to walk at all	5

In the last 2 weeks did the pain prevent you from carrying out your work housework and other daily activities?	No not at all	0
	I could continue with my work but my work suffered	1
	Yes for one day	2
	yesfor2-6days	3
	yesfor7daysormore	4
In the last 2 weeks for how many days have you had to stay in bed because of the pain?	None at all	0
	Between 1 and 5 days	1
	Between 6 and 10 days	2
	For more than 10 days	3
In the last 2 weeks has your sex life been affected by your pain?	Not affected by the pain	0
	Mildly affected by the pain	1
	Moderately affected by the pain	2
	Pain prevents any sex life at all	3
	Does not apply	NA
In the last 2 weeks have your leisure activities been affected by your pain?	Not affected by the pain	0
	Mildly affected by the pain	1
	Moderately affected by the pain	2
	Severely affected by the pain	3
	Pain prevents any social life at all	4
	Not at all	0
In the last 2 weeks has the pain interfered with your ability to look after yourself (e.g. washing, dressing etc.)		
	because of the pain I needed some help looking after myself	1
	because of the pain I needed a lot of help looking after myself	2
	Because of the pain I could not look after myself at all	3

Scoring Method

Total number of points = SUM (points for all questions answered)

Back pain severity score = [SUM (points for all questions answered) / SUM (maximum possible points for questions answered)] * 100

Interpretation

• Minimum - maximum back pain severity scale: 0 - 100%

• The higher the score the greater the severity of the back pain.

Study Outcome:

The pain score before treatment by Aberdeen low back pain scale was 72.8%

The pain score after treatment by Aberdeen low back pain scale was 31.4%

Siddha Diagnostic Tool : After Treatment

***En Vagai Thervu* (Eight Fold Examination)**

Naadi (Pulse) : *Vatha Pitham*

Sparisam (Touch) : *Mitha Veppam*

Naa (Tongue) : Normal

Niram (Complexion) : Normal

Mozhi (Voice) : *Sama oli*

Vizhi (Eye) : Normal

Malam (Stool) : Normal

Moothiram (Urine) : Normal. 5-6 times /day

Nei kuri (Oil drop test in urine): Slowly Spread, round shape

Informed consent

A written informed consent was obtained from the patient before starting the treatment.

DISCUSSION:

Thandaga Vatham is one of the most common degenerative joint disorders causing health problems from backache to neurological problems. *Yugi munivar* has classified "*Thandaga Vatham*" as one among the 80 types of *Vatha* diseases. The disease *Thandaga Vatham* may be correlated with lumbar spondylosis of modern medicine.

As per the Siddha literature the medical intervention of a disease is based to restore the homeostasis of the three humours (*Vatham, Pitham, Kabam*). As *Thandaga Vatham* is one of the Vatha diseases, so purgation is the therapeutic management to neutralize the vitiated *vatham*.

" *Bethiyaal thaazhum vatham*……." [6]

Since the derangement of *vatham* is considered as the prime cause for physical body deterioration, so that purgation is given for three consecutive days to manage chronic *Thandaga Vatham* disorder. [7] *Agathiyar kuzhambu* is mainly used as therapeutic as well as prophylactic purgative medicine. But its action changes widely based on the adjuvant used along with it. For the above case *Agathiyar kuzhambu* had given with ginger juice because ginger extract (GE) significantly modulated the fecal microbiota structure and promoted the growth of some beneficial bacterial populations, such as Bifidobacterium and Enterococcus.[8] The gut microbiota can directly modulate dorsal root ganglia neuronal excitability, and regulate neuro inflammation in the peripheral and central nervous systems under chronic pain as well as neuropathic pain conditions. Neuropathic pain is pain caused by damage (e.g. nerve trauma) or disease (e.g. spinal stenosis) affecting the somatosensory nervous system, including peripheral and central nervous systems.[9]

A recent study also demonstrated that gut microbiota may play an important role in neuropathic pain induced by peripheral nerve trauma. It was found that abnormal composition of gut microbiota may contribute to neuropathic pain and anhedonia susceptibility induced by spared nerve injury (SNI) in rats.[10] The gut microbiome is a crucial modulator of visceral pain, whereas recent evidence suggests that gut microbiota may also play a critical role in many other types of chronic pain, including inflammatory pain, headache, neuropathic pain, and opioid tolerance. [11]

Microbial dysbiosis which refers to a change in the structural or functional configuration of gut microbiota causes disruption of gut homeostasis and is associated with a variety of diseases including neurological disorders, allergies, inflammatory and infectious diseases. [12] So that the purgative therapy (*Bethi Maruthuvam*) is effective in the management of *Thandaga Vatham*, because of its mechanism over the gut flora dysbiosis.

The external therapy *varmam* was given after the course of purgative medicine. The pressure manipulation with these *varmam* points might interact with the

mechanism of the pain pathway. The pressure manipulation may produce the peripheral endogenous opioid peptides in immune cells. The peripheral opioid receptors are expressed in peripheral sensory (dorsal root ganglion) neurons and can interact with exogenous or endogenous opioid ligands in humans. Inflammation of peripheral tissue leads to up-regulation of such opioid receptors and to local production of endogenous opioid peptides in immune cells.[13] These endogenously released opioid peptides can modulate signal transduction mechanisms and intracellular processes that lead to alterations in protein phosphorylation and gene expression. These effects of opioids at the cellular level may underlie the mechanisms of pre-emptive analgesia and neuroplastic changes such as tolerance, dependence, sensitization, hyperalgesia, adaptation, addiction, and modulation of pain memories.[14]

CONCLUSION:

Nowadays traditional system of medicine is believed to be highly curative and preferred due to is effective control, long term relief and safe to use. The analgesics and NSAIDs cannot be administered on a longer extent. So in this article it is concluded that the patients who are not respond to the long term NSAIDs, the purgation along with the *varmam* therapy is more effective in the pain management. So this treatment would be a better alternative. It also may prevent the further complications.

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