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Case Study

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EFFECT OF AGNIKARMA AND VIDDHAKARM IN THE MANAGEMENT OF PAIN AND STIFFNESS IN GRIDHRASI W.S.R. TO SCIATICA - A CASE STUDY

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ABSTRACT

Sciatica and Lower back pain are the most common disorders seen in elderly people which can be correlated with Gridhrasi. In this case study, the target was to find intervention effective in relieving the pain of the patient without oral administration of any medicine, and such therapies are Viddhakarm and Agnikarma chikitsa, described by Acharyas for the effective management of various disorders. Our study involves only Suchi (Needle) for Viddhakarm and Suvarn Shalaka for Agnikarma. Among the various Dahanopakaranas or the materials used for Agnikarma, Shalakas are the most commonly used *Upakarana*. Based on the Ayurvedic classics and practical experiences various Shalakas have been innovated and been used in practice such as Panchadhatu shalaka, Tamra shalaka, Suvarna shalaka, Rajata shalaka etc. Viddhakarm and Agnikarma is used in this case study to assess its efficacy in relieving pain and stiffness. A 52 year old female

patient came with complaints of left lower back and knee joint pain for 2-3 years. Patient was treated by Agnikarma and Viddhakarma every week for 6 weeks consecutively, which gave complete relief from pain. It can be conducted as an outpatient procedure and is without any systemic adverse effects. Agnikarma and viddhakarm is found safe, easy, cost-effective and OPD level procedure.

KEYWORDS: Agnikarma, Viddhakarm, Sciatica, Gridhrasi, Suvarn shalaka, joint pain, Lower back pain.

INTRODUCTION

The word *Gridhrasi* itself suggest the gait of the patient which is similar to *Gridhra* (vulture) due to pain. Gridhrasi is one of the 80 varieties of Nanatmaja Vatavyadhi. the Cardinal symptoms are Sthamba, Ruk, Toda, Spandana in the Sphik, Kati, Prushta, Uru, Janu, Jangha, and Pada if Vatadosha is predominant, in case Vata-Kapha Doshadhikya Tandra, Aruchi, Gaurav are explained.[1]

"गुधवत चलते यस्मिन ।।"

Gridhrasi can be co-related to Sciatica based on its cardinal symptoms. Sciatica is a debilitating condition characterised with pain and/or paraesthesia in the sciatic nerve distribution or an associated lumbosacral nerve root. Symptoms aggravates with flexion of lumbar spine, twisting, bending or coughing. Sciatica can be diagnosed by thorough history, physical examination and clinical features. Most Cases of Sciatica resolve within 4-6 weeks without need of any medical treatment, however this duration differs significantly from one person to another, as for many patients, the pain can only last for few days, while others sciatica can become chronic and lasts for months to years.

The disease in which the two great nerve trunks (kandara) which emanating from below lower extremity of thigh reach down to the bottom of the insteps and toes and become stuffed or pressed with enraged vayu, thus depriving the lower extremities of their power of locomotion is called *Gridhrasi*.

According to Chakradatta and Yogratnakar in Vatvyadhi chapter Viddhakarma and Agnikarma is indicated. [2]

Viddhakarma is a technique with dry needles. According to Ayurveda, the origin of Viddhakarma comes under one out of sixty types of Vrana Upakrama, Astavidha, and Shadvidha Shastrakarma. [3-5]

Agnikarma, a para-surgical procedure has attained importance as a treatment for several complex diseases during the period of Sushruta. Sushruta, father of surgery has earmarked the Agnikarma as supreme in all the para-surgical procedures. [6] A separate chapter in text Sushrut Samhita having details about every aspect of Agnikarma denotes its importance in the treatment, during that period. A number of diseases and conditions have been explained in text where Agnikarma as therapeutic measure has been indicated and in many disorders like Gridhrasi, Avabahuk, Shiroroga Agnikarma is found to be very effective to relieve pain. [7-9]

Present day Treatment of Sciatica is mainly a course of corticosteroids, localised corticosteroid injections, NSAIDs, Spinal manipulation, Opioids and non-opioids analgesics, Deep tissue massage, muscle relaxants, Surgical corrections for Disc herniation, Epidural abscess or Tumour. All these treatments have complications and adverse reactions like paraesthesia, loss of strength, loss of bowel and/or bladder functions, aggravated pain or even permanent nerve damage.

Hence it is need to find better alternatives like Bastikarma, Snehana, Swedana, Raktmokshan, Agnikarma, Viddhakarma, Shamanopay that have lesser or no side effects are yet to be used as primary treatment therapy. This study involves Agnikarma and Viddhakarma for management of sciatica.

Case description

- A 52 year old female patient attended Shalyatantra OPD of GACH, Nanded with complaints of pain in left leg from hip joint up to ankle joint, for 2-3 years.
- History of present illness: Above mentioned patient was healthy and without any feeling of un-ease before 2-3 years, then felt excruciating pain at lower back while working in farm and started observing same every now and then while doing any strenuous work. Pain gradually increased and started radiating from back towards knees and to ankle joint of affected side. Patient used OTC medications for pain, which gave no relief further multiple prescriptions of General Practitioners that contained Pregabalin, Ultracet etc. which showed temporary relief.
- Comorbidities- HTN since 03 years on Rx (Tb.Telma 40mg 1 OD)
- Addiction- (*Bidi*) smoking for around 8-10 yrs. (stopped since last 3 years)
- Surgical History- Appendectomy at 20 yrs. of age
- Present Complaints: Pain at left leg radiating from hip joint upper leg knee joint lower leg – ankle joint

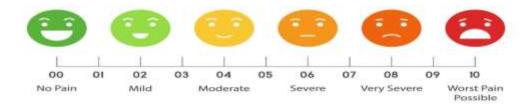
More at knee and hip joint specially

O/E- Blood pressure - 130/80mmhg

- Pulse rate 86/ min
- Temperature 98.0F
- Weight 78kg
- S/E
- R/S AEBE clear
- CVS S1S2 Normal
- CNS conscious, oriented
- P/A Soft, non-tender
- O/E
- SLRT: Lt 35* Painful, Rt 80* Painless
- Pain on VAS scale 7/10
- Stiffness at Knee and hip joint
- Mild oedema around ankle & knee joint (no piting)
- Crepitus felt on flexion-extension of knee
- No any c/o tingling or numbness
- All Routine investigations were within normal range

Parameters for assessment

1) Pain on VAS [Visual Analogue Scale]



2) Stiffness at Knee and Hip joint -

None / Free Movements: 0

Mild Stiffness / Movements with efforts: 1

Moderate Stiffness / Movements restricted: 2

Severe Stiffness / Movements completely restricted: 3

3) Oedema at Knee and Ankle joint –

Absent: 0

Present: 1

4) Tenderness

Absent: 0

Present: 1

5) Crepitus at Knee Joint

Absent: 0

Present: 1

6) SLRT (Straight leg raise test)

Negative (Above 70* Painless): 0

Positive (Between 50* to 70* Painful): 1

Positive (Between 30* to 50* Painful): 2

Intervention

In present study we used Suchi (26G ½ inch length needle) for purpose of Viddhakarma and Suvarna Shalaka for Agnikarma.

Viddhakarma was done at total 5 sites with help of needle, taking proper aseptic precautions.[10]

Sites

- ► Sciatic Notch at 45* angle
- ► Kshipra Viddha point
- ► 4 Angul Above Knee Joint at lateral aspect
- ► 4 Angul Below Knee Joint at lateral aspect
- ► 2 Angul Above Ankle Joint at lateral aspect



Agnikarma is done at sites mentioned belove with help of *Suvarna Shalaka* using candle to gradually heat *shalaka* from another end, until bearable by patient. Aim is to achieve transfer of heat to deeper tissue gradually. Patient is further adviced to apply *Ghrita* over *Agnikarma* points. [11]

Sites

- ► 4 Angul above knee joint at lateral aspect
- ► 4 Angul below knee joint at lateral aspect
- ► 2 Angul above ankle joint at lateral aspect
- ► Second digit of little toe at lateral aspect
- ► Sites of extreme pain (Lower Back and Knee)



Treatment given once a week after total 06 weeks Patient showed complete relief from pain. [12]

RESULT

Symptom	Before treatment	After treatment
1) Pain on VAS	7	0
2) Stiffness of Knee and hip joint	2	0
3) Oedema at knee and ankle joint	1	0
4) Tenderness	0	0
5) Crepitus at knee joint	1	1
6) SLRT	2	0

DISCUSSION

After 6 settings pain, oedema and stiffness is found completely resolved. Range of motion shows improvement in terms of SLRT angle, whereas crepitus is still felt at knee joint while flexion and extension.

The mode of action of Agnikarma involves several mechanisms that contribute to its therapeutic effects

- 1) Thermal stimulation: Heat applied to specific points stimulates nerve endings, releasing neurotransmitters that block pain signals to the brain.
- 2) Increased blood flow: Heat dilates blood vessels, improving circulation and delivering oxygen and nutrients to affected areas.
- 3) Relaxation response: Heat application triggers a parasympathetic response, promoting relaxation and reducing muscle tension.
- 4) Reducing inflammation: Heat can reduce inflammation by increasing circulation and promoting the removal of inflammatory mediators.
- 5) Stimulating cellular repair: Heat shock proteins are activated, stimulating cellular repair and regeneration processes.
- 6) Endorphin release: Heat stimulation releases endorphins, the body's natural painkillers.
- 7) Modulating pain pathways: Agnikarma may modulate pain processing in the brain and spinal cord, reducing pain perception.

By activating these mechanisms, Agnikarma provides pain relief, reduces inflammation, and promotes healing in the affected area, making it an effective therapy for managing conditions like Gridhrasi (Sciatica) and other musculoskeletal disorders.

Probable modes of action of *viddhakarma* includes

- 1) Mechanical effects: Physical manipulations and breach in integrity help improve joint mobility, reduce stiffness, and enhance range of motion.
- 2) Neurological effects: Stimulation of nerve endings and neural pathways can help reduce pain, inflammation, and muscle spasm.
- 3) Circulatory effects: Improved blood flow and lymphatic circulation help reduce inflammation, promote healing, and remove waste products.
- 4) Muscular effects: Relaxation and stretching of muscles help reduce tension, improve flexibility, and enhance strength.
- 5) Psychological effects: Relaxation and stress reduction through Viddhakarma can help alleviate anxiety and depression.
- 6) Detoxification: Viddhakarma helps remove toxins and waste products from the body, promoting overall health and well-being.

7) Immune system modulation: Viddhakarma may help stimulate the immune system, promoting the body's natural healing processes.

By combining these mechanisms, Viddhakarma provides a comprehensive approach to managing various health conditions, including musculoskeletal disorders, stress, and anxiety, and promoting overall health and wellness.

CONCLUSION

- ▶ *Viddhakarma* and *Agnikarma* are found useful in treatment of *Gridhrasi* in present case.
- ▶ Most of the symptoms and clinical features of sciatica are relieved without using any systemic medicine in present case study, a long-term study involving larger number of Patients can produce strong evidence.
- ▶ It can be conducted as an outpatient procedure and is without any systemic adverse effects. Agnikarma and Viddhakarm is found safe, easy, cost-effective and OPD level procedure.

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