

Pharmacological approach in the Management of Katishula (Low back ache) - A case study

Case Report

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Abstract

Katishula (low back ache) is one of the major health problems now a days which affects approximately 60 – 85% of adults during some point of their life causing trouble to their daily routine. It is *shosha* (degeneration), *sthamba* (stiffness), and *shula* (pain) predominant *vyadhi* (disease). It is clearly stated in the classics that the pain is produced due to stiffness which is produced by *sama* or *nirama vayu* movement in the *kati* (low back) region. Ayurvedic classics have mentioned appropriate treatment modalities for *kati shula*. A 24 year old female patient with *katishula* was treated conservatively with internal medicine and *panchakarma* (treatment procedure). Patient presented with low back ache for 1 year with aggravated symptoms like shooting pain, pain while standing and pain in the left leg. SLR was positive being 20 degree on the left leg and was negative in the right leg. There was no history of any kind of trauma. Management was done in 2 rounds where the first part included *matra basti* and oral medications, through which the symptoms got reduced around 40 – 50% and in the second part of the treatment patient was managed only with the oral medications which gave very good results where the patient was almost completely relieved.

Key Words: *Katishula*, low back ache, Ayurveda, *Panchakarma*, *Matra basti*, Pharmacological approach.

Introduction

Ayurveda is an ancient system of medicine which gives more importance to the *Tridoshas* i.e. *Vata*, *Pitta* and *Kapha* which makes the basic components of the body whose balance keeps a man healthy and imbalance leads to *roga* (disease) (1). One among the *Tridoshas* is *Vata* which due to various causative factors gets vitiated and accumulates in the *kati* region causing *kati shula*. *Kati shula* has not been described as a separate disease in *brihatrayis*, rather it has been mentioned as a symptom of the disease *Gridhrasi* (Sciatica). (2). It has been mentioned as *trika graham*, *prishtha graham* in the context of *vataja nanatmaja vikaras* by *acharya Charaka* (3). *Madhavakara* of *Madhava Nidana* mentions *kati shula* as *trika vedana* which is caused due to accumulated *Vata* in *Pakvashaya* (4).

Kati shula is one of the common health problems in the present era and has become a major cause of affecting the people's daily routine. Due to

various causative factors the *Vata* gets aggravated and causes pain and restricted movements in the *Kati* region(5) which may also be seen in the legs. Ayurvedic approach in the management may be very much helpful with least or no side effects which mainly concentrate on balancing the aggravated *Vata dosha*.

Low back pain is a common disorder involving the muscles, nerves and bones of the back. It is a multi-factorial disease affecting vast population (6). Several risk factors are responsible for the development of low back ache. According to WHO risk factors are of two types, occupational and non-occupational /personal. Major occupational risk factors are static muscle load, prolong improper static sitting or standing. Other socio demographic factors include sex, age, smoking, obesity etc (6). There is evidence that low back pain results in an alteration in the functions of local muscles, which loses their protective role, disturbances in neuro muscular control have also been frequently connected with chronic low back pain (7).

Modern treatment includes the use of muscle relaxants, anti-inflammatory analgesics, narcotics, steroids, physiotherapy and finally when all the medications fail surgery will be indicated (8).

Case Presentation

A 24 year old female patient came to our OPD with the complaint of pain in the *Kati* region (low back ache) and pain in the left leg with a history of 1 year,

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which got aggravated since 5 months associated with disturbed sleep and restricted movements. There was no history of any kind of trauma. Patient took treatment in modern medicine with NSAIDS, calcium supplements etc which gave her temporary relief but the symptoms reoccurred again. X ray showed no major complications but only showed nerve compression. Then the patient came to our OPD with the same complaints and she was slightly limping on one side while walking due to pain. Personal history reveals that the patient was vegetarian and used to take oily foods in excess and as she was a student she used to stand continuously for 2 to 3 hours in her practical classes every day. There was no significance in her past and family history. On examination SLR test was positive on left leg with 20 degree and was negative in the right leg. There was slight tenderness in the *Kati* (low back) region.

Diagnosis and Assessment

On the basis of the observed signs and symptoms the diagnosis was confirmed as *Kati shula*. Assessment of the criteria's was done by giving grades from 0 to 3 where 0 indicates no symptom, 1 indicates mild, 2 indicates moderate and 3 indicates severe. For limping 0 indicates no limping, 1 indicates slightly limping, 2 indicates difficulty to walk (can walk with stick) and 3 indicates unable to walk. The criteria's were graded before and after the treatment for the assessment of results.

Table No 1: Gradation before the treatment

Subjective criteria	Grade	Objective criteria	Grade
Pain	3	Tenderness	1
Limping	1	SLR test	20 degree on left leg
Difficulty in walking	2		

Management

As per the classics the line of management includes *snehana*, *swedana* and *basti* for the balancing of *Vata dosha* which is the main cause of the disease. Along with the above procedures the oral medications were also selected on the basis of their *Vata hara*, anti-inflammatory, strengthening and nerve stimulating properties.

Materials and Methods

Clinical findings:

Subjective findings:

1. Severe pain in the low back region and left leg.
2. Slightly limping the body on one side while walking.

Objective findings:

1. Slight tenderness in the low back region.
2. SLR test was +ve for left leg and -ve for right leg.

Treatment

Patient was treated with *Panchakarma* i.e *Snehana*, *Swedana* and *Matra Basti* for 7 days along with oral medications for 21 days which relieved her from pain to a certain extent. In her first follow up after 21 days the second part of treatment was started only with oral medications without any *Panchakarma* procedures for 30 days. With this the patient was almost cured from her symptoms.

Patient was treated with *panchakarma* for 7 days i.e

- *Sthanika Abhyanga* (external oleation) – *dhanvantaram taila*
- *Sthanika swedana* (fomentation) and *Matra basti* (a type of enema) – *dhanvantaram taila* (60 ml)

Treatment (1ST Round for 21 days)

1. *Snehana*, *swedana* and *matra basti* (for 7 days)
2. *Lashuna ksheera paka* - every morning on empty stomach
3. *Prasarinyadi kashaya* – 2 tea spoons with 4 tea spoons of water for three times a day after food
4. *Lakshadi guggulu* – 1 tab three times a day after food
5. Tab Spondylon – 1 tab three times a day before food.

Method of administration of Matra Basti

Sthanika Abhyanga was done with *Dhanwantaram taila* and then *sthanika Swedana* was done to *kati* and thigh regions. Then the patient was asked to lie in the left lateral position with his left leg folded at knee joint. After lubricating the anal region and *basti netra* (nozzle), *Basti netra* was inserted into the anal canal and the *Basti dravya* (medicine) was slowly administered after which the *basti netra* was taken out slowly. This was repeated for 7 days.

Treatment (after 21 days)

1. *Kumari asava* – 25 ml with half glass of hot water at night
2. *Saptasara kashaya* – 25 ml with half glass of hot water at night
3. Tab Arnopen – one tab two times a day after food
4. Tab Palsinuron – one tab two times a day after food
5. Tab Nilfat – two tablets two times a day with lemon water and honey
6. *Gandha taila* – for external application.

Results and observation

There was around 45% to 50% result after the first round of treatment for 21 days, after that the patient was given with oral medications for 30 days. After the completion of 30 days, the patient reported with positive response as the pain was reduced to its maximum and the difficulty while walking was also reduced. She was almost cured with 80% of positive result.

Table No 2: Gradation after treatment

Subjective criteria	Grade	Objective criteria	Grade
Pain	1	Tenderness	0
Limping	0	SLR test	80 degree on left leg
Difficulty in walking	0		

Discussion

The result that the patient got proved that the treatment was almost successful which was mainly concentrated on balancing *Vata dosha*, repairing the nerve damage and strengthening it. Weight of the patient was also considered and measures were taken to reduce it. There were no adverse reactions seen with the given treatment.

Abhyanga(massage) and *swedana*(fomentation) – *Abhyanga* provokes the blood vessels to dilate resulting in increased circulation and promotes absorption and healing(9). *Swedana* through its *ushnatva guna* balances the aggravated *vata*, however *katishula* is a *sweda sadhya vyadhi*(10).

Lashuna ksheerapaka – Due to its *katu*(pungent) *rasa* and *vipaka*, and *ushna virya* it reduces the *vata* and relieves the *kati shula*(11)

Prasarinyadi kashaya – Most of the herbs used in this formulation possess *ushna virya* and have *snigdha* *guna* (unctuous), *balya* (strengthening) and *rasayana* (rejuvenative) properties which reduces *vata* and nourishes the tissues and strengthens the nerves(12).

Lakshadi guggulu – The properties like *shothahara* (anti-inflammatory), *sandhanakara* (healing), *balya*, *rasayana*, *vedana sthapana* (analgesic) are helpful in reduction of the symptoms (13).

Tab Spondylon – Acts by stimulating the nerve.

Kumari asava – Due to its *vatahara* property it breaks down the *samprapti* (pathophysiology) and also corrects the menstrual irregularities (14).

Saptasara kashaya – Its anti inflammatory property helps in alleviating the pain (15).

Tab Palsinuron – It contains herbal and mineral ingredients which balances *Vata dosha*, stimulates the nerve and neutralizes the ph in the stomach (16).

Cap Arnopen – This contains herbal and mineral ingredients which are anti-inflammatory, analgesic in nature and lowers the serum cholesterol and blocks the contractions induced by Carbachol and Potassium (17).

Matra basti – *Virya* (potency) of *basti* (enema) conveyed to *apana*, then *samana*, then goes to *udana*, *vyana* and *prana* thus providing efficacy all over the body reducing *vata*, restores disturbed *kapha* and *pitta* thus helps in breaking pathogenesis (18).

Conclusion

Due to the changing lifestyle, food habits, restless schedule, lack of exercise, working for long hours in the same position, the *doshas* gets disturbed and causes the conditions like *katishula* making the individual incapable to perform his daily routine normally. Ayurvedic approach towards the disease proved to be successful in treating the disease through *matra basti*, *shamana chikitsa* (palliative treatment) and by following proper *pathya* (wholesome food) and *apathya* (unwholesome food). Balanced diet, regular exercise and following healthy routine will be helpful in preventing the disease.

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