The Management of Katishoola (vertebral Compression fracture) through Panchakarma- A case study

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ABSTRACT

Background: In present era low backache (Katishoola) is a common complain among the patients visiting hospital for treatment. There are various causes for low backache like compression fracture, inter vertebral disc prolapse [IVDP], Lumbar spondylosis, tuberculosis of spine etc. About 39% of the population present complaints of low back pain at some point in their lives, Incidence is more in females aged between 40 and 80 years. vertebral compression fracture (VCF) are one of the cause of severe low backache. VCF is a common fracture of the spine. The symptoms of VCF are back pain, numbness, tingling, and weakness and intensity of pain increase while standing or walking. It can be correlated with Katishoola in Ayurveda. In contemporary science there is no treatment except some invasive procedure like vertebroplasty. Here in this case pain in lower back associated with tingling sensation managed with Ayurveda Panchakarma treatment like Matra Basti, Katibasti, Pinda Swedana. The collected data shows that Panchakarma therapy along with oral medicine gave encouraging effect in low backache. Material and method: In this study the patient with complaint of pain in lower back, tingling sensation, unable to stand for long duration approached to the OPD of Panchakarma, AIIA hospital. He was managed with Panchakarma therapies along with oral medicines. Effect of treatment was assessed before and after the treatment on presenting complaints. Result and observation: Significant improvement was noticed in Score of Oswestry low back pain index, Low back outcome score (LBOS). Discussion: In this case study we are focusing in the management of low backache due to wedge compression fracture through Ayurveda oral medicine along with Panchakarma to further deterioration of the condition of the patient.

Keywords: Vertebral Compression Fracture, Low Backache, Katishoola, Panchakrama, Matrabasti, Patrapinda Swedana.

INTRODUCTION

Ageing is ongoing process along with degeneration in body. But today's altered life style is bringing the process of degeneration too early and resulting in development of degenerative diseases, most common being arthritis, spondylosis, PID, low back pain etc. Katishoola (Low back pain) is classified into specific and non-specific types. In 90% cases no identified cause are known, and 10% remaining cases are identified such as fracture, infection, cancer etc. Vertebral compression fracture (VCF), is a common fracture of the spine. The body of vertebra suffered a crush or wedging injury. The commonest risk factor for compression fractures is Osteoporosis. If spinal cord or nerves are involved then bowel/bladder dysfunction along with numbness, tingling sensation and weakness in the limbs occur .patient with VCF have 5 times more risk of second VCF [1], Acharya Charaka has described 80 types of Vatavayadhi known as Nanatmajavatavyadhi, kati shoola is one among them. It characterized by Kati pradeshevedana (pain in lower back region), Kati shunyata (numbness in lower back), Hasta-pada suptata (numbness in legs). With Ayurvedic approach to cure katishoola by Panchakarma like Matrabasti, katibasti and patra pinda swedana and oral medicine gave promising results without any side effect.

MATERIALS AND METHODS

Type of study- The present study is a case report on the prospective study of Ayurveda treatment in the management of patient diagnosed with low backache due to VCF.

Source of Data- A patient referred to the Department of Panchakarma, AIIA, Sarita Vihar, New Delhi 110076.
CASE REPORT

A 56-year-old male patient, UHID 377446, presented with pain in lower back localized to the region of the lumbar spine due to which he was unable to stand for longer duration of time since last 1 month. He was also complaining of tingling sensation in back radiating to bilateral lower limbs. After taking the detailed history, patient explained that the pain occurred while he was lifting the heavy weight and it got worst day by day so he went for medical treatment in allopathic hospital. Where MRI revealed chronic central wedge compression fracture at L1 and mild canal stenosis. He took some conservative treatment for the same but does not get significant relief in pain.

He rated his pain as 8/10 on the Visual Analogue Scale (VAS) where 0 is “no pain” and 10 is the “worst pain that he had ever experienced.” The pain was described as sharp and stabbing, Radiating to bilateral lower limbs. After taking the detailed history. Patient explained that the pain was exacerbated by direct pressure over the painful area and any movements of the lower axial spine. He denied any difficulty with bowel and bladder function. Past medical history revealed that he had been diagnosed with “mild” osteoporosis two year prior. Systems examination and family health history was unremarkable. He had no addiction and previous history of any back injury. He was having trouble in getting a sleep due to lower back pain.

Investigations

MRI (10/05/19)

- Chronic central wedge compression fracture (10-20% reduction in height), L1 caved in superior end plate, mild canal stenosis.
- L5-S1 Mild central canal stenosis with bilateral facets joint arthropathy.
- Broad based posterocentral disc protrusion with posterior annular tear at L4-5 causing indentation upon the thecal sac mild to moderate narrowing of B/L Neural foramina. Moderate central canal stenosis.

Personal history

Vegetarian with Irregular bowel, disturbed sleep (due to pain), no addiction of alcohol and smoking.

Assessment Criteria: Range of movement SLR was measured by Goniometer. Visual Analogue Scale (VAS) is used for pain; Improvement was assessed by Low back outcome score (LBOS) and Oswestry disability index.

Table 1: Dashavidha Pariksha

| Sl. no. | Factor  | Observation     |
|--------|---------|-----------------|
| 1      | Prakriti| Vatakaphaja     |
| 2      | Vikriti | PravaraTridosha |
| 3      | Saara   | Twaka           |
| 4      | Samhanana| Madhyama      |
| 5      | Saymya  | Madhyama        |
| 6      | Satva   | Madhyama        |
| 7      | Aahar shakti | Madhyama |

Table 2: Following Oral medications were given

| Sl. no. | Drug                                   | Dose                          | Anupana          |
|---------|----------------------------------------|-------------------------------|------------------|
| 1       | Dashmoola Kwatha                       | 40 ml, twice a day before food | Luke warm water  |
| 2       | Lokshadi Guggulu                       | 500 mg thrice a day, after food| Luke warm water  |
| 3       | Gandha taila                           | 10 drops twice a day, after food| Luke warm Milk   |
| 4       | Ashwagandha choorna                    | 2 gm each twice a day, after food| Luke warm water  |
| 5       | Eranda Taila                           | 10 ml bed time                | Luke warm water  |

Table 3: Panchakarma procedures with quantity and duration

| Sl. no. | Procedure                  | Drug used                      | Quantity | Days                      |
|---------|----------------------------|--------------------------------|----------|---------------------------|
| 1       | Choorna Pinda Swedana      | Kolkulathadi Choorna taila     | Q.S      | 14 days For 30 minutes    |
| 2       | Matra Basti                | Sahacharadi taila              | 60 ml    | 14 days                   |
| 3       | Kati Basti                 | Dhanwantaram Murivena taila    | Q.S      | 14 days For 30 minutes    |

Table 4: Pain was assessed by VAS score

| Sl. no. | Score  | Before treatment | After treatment |
|---------|--------|------------------|-----------------|
| 1       | 0 to 10| 8                | 2               |

Table 5: straight leg raising test

Before treatment

| Before treatment | After treatment |
|------------------|-----------------|
| Right leg        | Left leg        |
| 45 degree        | 35 degree       |

Table 6: Oswestry low back pain index

| Sl. no. | Score                                    | Before treatment | After treatment |
|---------|------------------------------------------|------------------|-----------------|
| 1       | 0-20% minimal disability                 | 55% (severe disability) | 24% (moderate disability) |

Table 7: Low back outcome score (LBOS)

| Sl. no. | Score | Before treatment | After treatment |
|---------|-------|------------------|-----------------|
| 1       | ≥ 65  | 27               | 45              |
In present case study, the effects of aging. Vedanta Sthapak - at 45%, Oswestry low back pain index, which is the main culprit for the disease.

Vedanashamak, Vatakaphashamak, mainly indicated in bhagna. Decreasing pain and swelling (inflammation), also prevent Vatakaphashamak - which is the main culprit for the disease. Dhathu Kshaya (depletion / malnutrition) and Srotas Avarodh (channel obstructions) main pathological cause for aggravation Vata Dosha.

In this case the vata prokopa was mainly due to dhatukshaya in general and asthi kshaya in particular among vata types Apana Vata is mainly involve in Kati Shoola. The purpose of the therapy, therefore, is to pacify vitiating Vata Dosha, particularly Apana Vata. so Snehana, Swedana and Basti Karma were adopted to pacify vata dosha and regulate its movement.

Shamana Chikitsa

Dashmoolu Katha - Dashmoolu is a well - known ayurvedic medicine having Tridosh Shamak. Due to its Ushna guna it pacifies the vitiating Vata Dosha which is the main culprit for the disease. Dashmoolu katha had anti-inflammatory, analgesic properties.

Lakshadi guggulu - it contains Ashthihrinkhala, Ashwagandha, Guggulu. In animal studies Ashthirinkhala nutralized the antianabolic effect of cortisone in healing of fracture. Here yield anabolic oxo steroid which accelerate healing of fracture Guggulu which is Vedana shamaka and mainly indicated in bhagna.

Ashwagandha - Due to its Snigdha Guna, Ushna Vira, is Vatakaphashamak, Balya (strength promoting), Rasayan and Vedanashamak properties. Withaferien act as a tonic and tissue vitalizer. It decreasing pain and swelling (inflammation), also prevent the effects of aging.

Giloya choorna - Ras Tikta, Katu, Kashaya, Guru Snigdha Guna, Virya Ushna. Snigdha and Ushna Guna which pacifies the Tridosh Shamak, Rasayana (improves immunity due to its immuno-modulatory effects). Mild Antipyretic, analgesic (Vedana Sthapak), antioxidant properties. Because of its antioxidant property it inhibiting the inflammatory mediators and cytokines.

Gandha taila - It contain krishna tila yasti, Bala, Rasna, Padmakadi Gana, Eladi Gana Analgesic Anti-inflammatory actions and provides stability to the bones. Bones are an important location of Vata and aggravation of Vata causes bone disorder like osteoporosis. It mainly indicated for Bhagna, Vata Vyadhi.

Eranda taila – Kashaya (Astringent), Madhura (Sweet), Katu (Pungent), Ushna Vyriya (hot in potency) pacifies the Vata and Kapha. It act as Vatanulomaka and, Mridu Virechaka.

Panchakarma therapies

Snigdha coorna pinda swedana - SCPS with kolakulathadi choorna was done. The main ingredient of kolkulathadi choorna is Kola, Kuthla, Surdaru, Rasna Kutha, Vacha etc maximam drugs katu Ross, laghu ruksha ushna vyriya. It does Doshavilayana and Srotoshodhana which helps in relieving Margavarana of Vata. It will reach to Sukshma Srotas and thus help in pacifying Vata Dosha.

Matra Basti - Matra Basti a type Sneha by virtue of its Ushna Guna. Vikalpa of Anuvasana basti. It reaches up-to Pakwashaya which is the main site of Vata dosha. Matra basti promotes strength, and given in all season without any stricted diet regime. It promote easy elimination of Mala and Mutra. According to Acharya Charaka Matra Basti performs the function of Brimhana and overcomes dhatukshaya and reduces Vata Prakopa. Sahacharadi taila is selected for Basti karma. most of the drug are Katu Rasa and Ushna Vyriya which pacify the Vata and Kapha, and reduce the pain and swelling.

Kati Basti - Kati Basti is a modified form of Sneha (oleation), swedana (sudation) therapy done together . By its local action it increases blood circulation and relieves pain. which has nutritive and stabilizing effect. The main Content of Dhanwantaram Taila is balmamo, dashmoolo, ksheera which have Ushna shamak, Balya, Brumahana Properties. In murivenna main ingredient is Karanja patra (Pongamia pinnata), Sigru (Moringa oleifera), Kanya (Aloe vera). Moringa leaf extract possess osteo-protective activity, anti-inflammatory property and reduced pain and swelling.

CONCLUSION

In Katishool (Low backache) there is vitiation of vata that result in pain (shoola). Here ayurvedic treatment principle of treating vata like Sneha Swedana Basti and Mridu Shadtha are mainly applicable along with oral vata pacifying drug. Hence, in the present case, having a severe backache due to VCF is being treated with Matra basti with Sahacharadi Taila, Kati Basti with Dhanwantara Taila and Murivenna and Snigdha Choorna Pinda Swedana with Kolkulathadi Choorna and Dhanwantar taila along with oral medicine like Dashmoolu Katha, Ashwagandha, Gandha Taila, Lakshadi Guggul provided significant relief in pain and range of movement which measured by VAS scale, Oswestry low- back pain index, SLR test, also improved the quality of life. thus the present case study provides a ray of hope and a lead to carry further research with larger sample size of patients suffering with a low back pain due to VCF.
Conflict of Interest

None declared.

Financial support

None declared.

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HOW TO CITE THIS ARTICLE

Verma P, Latika, Bhatted S. The Management of Katishoola (vertebral Compression fracture) through Panchakarma- A case study. J Ayu Herb Med 2022;8(3):156-159. DOI: 10.31254/jahm.2022.8302

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