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# ROLE OF VIDDHA KARMA IN PAIN MANAGEMENT OF MUSCULOSKELETAL DISORDERS

#### Vandana Anil Avhad

MD. Ph.D. (Panchakarma), Asso. Prof. (Dept. of Panchakarma), MAM's Sumatibhai Shah Ayurveda Mahavidyalaya, Hadapsar, Pune, Maharashtra, India

Email: drvandanapalve@gmail.com

#### **ABSTRACT**

**Introduction:** Disorders of the musculoskeletal (MSK) system are prevalent throughout the world, affecting all ages and ethnic groups. Musculoskeletal pain refers to pain in the muscles, bones, ligaments, tendons and nerves. According to Ayurveda all MSK diseases comes under one roof of *vatavyadhi* i.e. diseases occurred due to vitiation of *vata dosha*. Sushruta Acharya advised *siravedha* means *viddha* (bloodletting) treatment as a pain-relieving treatment. Pain in musculoskeletal diseases interfere with patient's day to day life. **Objectives:** In this clinical study *viddha karma* was selected to assess its role in the pain management of musculoskeletal diseases. **Methods:** This was single arm open label experimental clinical study. Total 22 patients were enrolled in the study fulfilling inclusion criteria. Written informed consent was taken. *Viddha karma* was done at the site of maximum pain. Readings were taken on visual analogue scale (VAS) before and after treatment. Collected data was analyzed with Wilcoxon sign rank test and conclusion was drawn. **Results:** Out of 22 patients 11 patients got 50% pain relief just after *viddha karma*. Patients could do their movements easily. Results were statistically significant and showed 41.9% effect of therapy to relieve the intensity of pain in musculoskeletal diseases.

**Conclusion:** *Viddha* treatment shows significant results in pain relieving of musculoskeletal disorders. It is helpful to reduce the intensity of pain and helps to improve quality of life.

Keywords: Viddha, Musculoskeletal disorders, Vatavyadhi

#### INTRODUCTION

Disorders of the musculoskeletal system are prevalent throughout the world, affecting all ages and ethnic groups. The principal manifestations are pain and impairments of locomotor function. Non-inflammatory conditions are far more prevalent than inflammatory disease. Non-inflammatory conditions are Neck & Back pain, Low back pain, Osteoarthritis, Knee pain, Hip pain, Osteoporosis, Regional soft tissue pain and

fibromyalgia.<sup>[1]</sup> All these diseases come under *vatavyadhi* i.e. diseases due to vitiation of *vata dosha*. Charak Acharya advised *snehana*, *swedana*, mild purgation as a treatment of *vatavyadhi*.<sup>[2]</sup> But many times after taking these treatments still patients were complaining of pain. In such cases Sushruta Acharya advised *siravedha* means *viddha* (bloodletting) treatment as a pain-relieving treatment.<sup>[3]</sup>

The aims of management of musculoskeletal disorders are; to educate the patient, control pain, optimize function and modify the disease process where possible. Simple and safe interventions should be tried first. [4] So in this study *viddha* was done to the patients who have complaining of localized (pinpoint) pain.

**Aim:** To study the role of *viddha* in pain management of musculoskeletal disorders.

**Materials:** Disposable needle no.26x1/2, Spirit, Cotton

**Methodology:** A single arm open label clinical study. Total 22 patients were enrolled in the study fulfilling inclusion criteria. Written informed consent was taken. *Viddha karma* was done at the site of maximum pain. Readings were taken on visual analogue scale (VAS) before and after treatment. Wilcoxon signed rank test was applied to data.

#### **Inclusion criteria:**

- 1. Diagnosed patients of neck pain, back pain, low back pain, knee osteoarthritis, rheumatoid arthritis, gout, sciatica, frozen shoulder.
- 2. Patients complaining pinpoint location of pain.
- 3. Age -20 to 60 years irrespective of gender.

#### **Exclusion criteria:**

- 1. Any other systemic conditions like k/c/o TB, HIV, CA.
- 2. Any other structural deformities.

#### Assessment criteria:

Subjective criteria: To assess pain relief, Visual Analogue Scale was used. On visual analogue scale, patients must mark on '0' to '10' numbers as per their intensity of pain. Readings were taken on visual analogue scale before and after *viddha* treatment. Readings were taken on vas where patients themselves fill the scale. Patient's satisfaction is more important in pain management.

#### **Observations:**

- 1. Out of 22 patients 17 were female and 5 patients were male.
- 2. 4 patients were in 20 to 30 years age group, 7 patients were in 31 to 40 years age group, 3 patients were in 41 to 50 years age group and 8 patients were in age group of 51 to 60 years.
- Out of 22 patients 8 patients were complaining of low back pain, 2 patients were of frozen shoulder,
  patients were of knee osteoarthritis and 7 patients were of sciatica.

#### **Results:**

**Table 1:** Readings on VAS before and after *viddha* treatment

No.	BT	AT	No.	BT	AT
1.	5	2.5	2.	6	4.5
3.	8	4	4.	6	3
5.	8	4	6.	5	2.5
7.	6	3	8.	5	2
9.	6	4	10.	8	4
11.	4	2	12.	8	4
13.	8	2	14.	8	6
15.	6	4	16.	9	7
17.	7	5	18.	10	9
19.	8	4	20.	7	3
21.	8	4	22.	8	6

#### Pain relief in percentage:

0-25 % pain relief = 5 patients

26 - 50% pain relief = 14 patients

51 - 75% pain relief = 3 patients

76 - 100% pain relief = 0 patients

#### **Statistical analysis:**

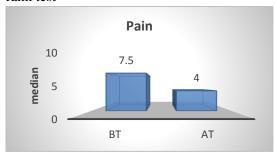
Statistical assessment was done by Wilcoxon Signed Rank Test.

Table 2: Wilcoxon signed rank test

P	Pain	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	raili	BT	AT	Wilcoxon Signed Rank W	r-value	70 Effect	Result
		7.5	4	-4.139 <sup>a</sup>	0.000	41.9	Significant

Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test to test efficacy. From above table we can observe that P-Value is less than 0.05. Hence, we conclude that effect observe dis significant.

**Graph 1:** Pain relief according to wilcoxon signed rank test



#### **DISCUSSION**

Disorders of the musculoskeletal system are prevalent throughout the world. The principal manifestations are pain and impairments of locomotor function. Noninflammatory conditions are far more prevalent than inflammatory disease. Hence in this study noninflammatory conditions like Neck & Back pain, Low back pain, Osteoarthritis, Knee pain, Hip pain, Regional soft tissue pain and fibromyalgia were selected. Most of the patients having these complaints took pain killers for long time. When they develop some side effects like hyperacidity, resistance of pain killer tablets, they come to take Ayurvedic medicine. According to Ayurveda all these diseases can co-relate with vatavyadhi i.e. disease due to vitiation of vata dosha. Charak Acharya advised snehana, swedana, mild purgation as a treatment of vatavyadhi. But many times, after taking these treatments still patients were complaining of pain. In such cases Sushruta Acharya advised siravedha means viddha (bloodletting) treatment as a pain-relieving treatment.

As per modern medicine, in the aims of management of musculoskeletal disorders described that simple and safe interventions should be tried first. So, in this study *viddha* was done to the patients who have complaining of localized (pinpoint) pain.

Acharya Sushrut said that pain is the cardinal symptom of vitiated *Vata Dosha*. Pain does not arise in the absence of *Vata*.<sup>[5]</sup> In *viddha* treatment when we insert the hollow fine needle into the painful site, first *aavruta vata dosha* comes out (*vatanulomana*) with its *laghu* and *chal guna* (properties) from that painful site and patient got pain relief immediately. <sup>[6]</sup> When the needle pierced in painful part, with *vatanulomana*, little quantity of blood also comes out. <sup>[7]</sup> Which gives the effects of *raktamokshana* (bloodletting therapy).

*Viddha* treatment is like acupuncture treatment. In acupuncture, fine needles were inserted into specific exterior body locations (acupoints) and manipulated to relieve pain. Sushruta Acharya also advised some specific points for *siravedha* (*viddha*) and also at the site of pain. The placement of needles may cause the release of neurotransmitters such as endorphins, pain killers that may inhibit pain pathways. Stimulation of large sensory fibres from peripheral tactile receptors depresses the transmission of pain signals either from the same area of the body or even from areas sometimes located in many segments.

The procedure was simple, economical and can be done in OPD level, gives upto 50% instant pain relief to most of the patients. After *viddha* treatment patients feel *laghava* (lightness) at the site of pain which leads to easy movements of that painful body part. This treatment can be done in *saam* and *nirama avastha*. *Viddha* treatment is not useful in breaking the pathogenesis of disease but it gives instant pain relief. Patients must take palliative treatment for breaking the pathology of disease.

#### CONCLUSION

Viddha treatment shows significant results in pain relieving of musculoskeletal disorders. All patients tolerated the treatment modality well and there were not any side effects noticed in any of the patient. It is helpful to reduce the intensity of pain and helps to improve quality of life.

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