

“Role of Ayurveda-based ‘ARTHROTHERMIA’ program in the management of various types of neuro-musculo-skeletal conditions : An observational study”

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❖ Abstract:

Introduction: Various types of Musculo-Skeletal pain are on the rise in our community. Long term uses of pain killers are not preferable by majority of patients. Invasive treatment is always last choice by most patients. In such condition, there is a necessity to find out an affordable, safer and faster treatment.

Aim and Objects: To Evaluate Effectiveness of ‘Arthrothermia’ procedure in various types of Musculo-Skeletal Pain.

Material and Methods: Total 198 patients having various types of Musculo-Skeletal pain were selected randomly for the study from Ayulink Ayurveda Hospital, Ahmedabad. All patients are treated with ‘Arthrothermia’ procedure. Assessment was done based on objective and subjective criterions.

Result: About 82.32% patients found much improvement in all symptoms while 8.08% patients found marked improvement.

Conclusion: ‘Arthrothermia’ procedure is found quick effective in various types of Musculo-Skeletal pain.

Key words: Arthritis, Pain, Arthrothermia, Back Pain

❖ INTRODUCTION:

Pain is an unfavorable sensation that brings an individual to the physician due to a halt from his routine works. Arthritis, Neuralgia, Muscular pain, Ligament problems etc. causes pain, inflammation and stiffness, which results in restricted mobility and flexibility. These conditions are on the rise in our community due to one or other reasons. With increase in longevity –various types of Musculo-Skeletal and Neurological types of pain and other conditions are going to become major health issues by the year 2025. It is estimated that India is likely to notice an endemic of above problems with about 80 percent of the population. NSAIDS and Steroids are most common choice by doctors to prescribe. But long term uses of them are not preferable by majority of patients. Invasive treatment is always last choice by most patients. In such condition, there is a necessity to find out an affordable, safer and faster treatment. Arthrothermia procedure can be best complimentary treatment for such people. It is comparatively affordable, faster and safer process.

As per Ayurveda, there can be no pain without *Vata*. *Vayu* is provoked by its own *Nidana* and circulates in the body. During circulation, *Vayu* lodge in a particular place where *Sthana*

Vikriti is already present. Hence provoked *Vayu* is situated in Snayu, Asthi or Sandhi and causes pain, swelling and stiffness.

❖ **AIM AND OBJECT:**

To Evaluate Effectiveness of ‘Arthrothermia’ procedure in various types of Neuro-Musculo-Skeletal conditions / Pain.

❖ **MATERIALS AND METHODS:**

1. Conceptual study:-

All textual quotation & available commentaries along with their modern parallels were referred for this part.

2. Clinical Study:-

Detailed history & physical examination of the each Patient was done and were recorded in the Performa.

Methodology:

It is a multiple heat treatment. It is a combination of ksharkarma and agnikarma treatment described in classical text books of ayurveda. Heat generated by combination of these both maneuvers to improve blood circulation to the ligaments and muscle involved, pacifies pain and tenderness; and also helps arrest stiffness, and improves flexibility. Combination of ksharkarma and agnikarma processes amalgamating the use of herbal chemical and mechanical heat for therapeutic purpose in a precise form is developed by Dr. Prerak Shah and named it Arthrothermia, which is now patented by Dr. Shah. Entire process details, instruments etc. are patented and cannot be published, expressed or described to others. We have referred classical text books to develop this procedure.ⁱⁱⁱ

CRITERIA FOR SELECTION OF THE PATIENT:

- A special Performa for the present study was prepared in which detail history and physical examination on the basis of principles of *Ayurveda*& modern science.
- Patients were selected from the O.P.D. of AYULINK AYURVEDA HOSPITAL, AHMEDABAD.

Inclusion Criteria:

- Patients presented with the classical as well as Modern signs and symptoms.
- Patients of either sex aged between 18 – 70 years were included.

Exclusion Criteria:

- Fever
- Pregnancy
- During menses
- Uncontrolled DM
- High& Low Blood Pressure
- Below 18 years and above 70 years
- Any Critical Condition of patient

❖ PLAN OF STUDY:

The research study was designed of Single therapeutic group. Total 198 patients were registered. The selected patients who fulfilled the inclusive criteria were treated with Arthrothermia procedure.

Table No. 1.1: Plan of Study

Group	No. Of Patient	Procedure	Dose	Duration	Follow-Up
A	198	Arthrothermia	-	Once in a week, Maximum 4 times (4 week)	Every 3 Months for 1 year.

❖ CRITERIA FOR ASSESSMENT:

1. Clinical improvement in sign & symptoms of disease.
2. On the basis of standard scale like pain score and improvement in quality of life.
3. Assessment of the therapy has been done by preparing clinical Performa.

Table No. 1.2: CRITERIA FOR ASSESSMENT OF THE CLINICAL SYMPTOMS DEPENDING ON THE SEVERITY

Symptoms	Grade 0	Grade 1	Grade 2	Grade 3
Pain	Nil	Mild pain (exaggerated by movement and subside by rest of joint)	Moderate pain (not relieved by rest but not disturbing sleep or other routine activities)	Severe pain (disturbing sleep and other routine activities and relieved by analgesic)
Stiffness	Nil	Mild	Moderate	Severe
Difficulty in Routine Activity	Nil	Mild	Moderate	Severe

Table No. 1.3 Overall Assessment of Therapy

85 - 100% Relief	Much improvement
25 - 84 % Relief	Marked improvement
0 - 24 % Relief	No Significant improvement

❖ **OBSERVATION AND RESULT:**

Table No. 1.4: Age wise Distribution of Patients having various types of Pain Conditions

< 40 year	41-59 year	> 60 year	Total
28	103	67	198

Table No. 1.5: Sex wise Distribution of Patients having various types of Pain Conditions

Male	Female	Total
59	139	198

Table No. 1.6: % of Patients having various types of Pain Conditions

Disease/ Condition	Out of 198 Patients	Percentage
Osteoarthritis (Knee)	123	53.95 %
Back Pain	44	19.30 %
Neck Pain	14	06.14 %
Frozen Shoulder	18	07.89 %
Heel pain	15	06.58 %
Other	14	06.14%

All the patients were examined in detail with respect to the special Performa. Before starting the treatment, symptoms present in all patients were graded and their values were noted as before treatment (BT). After completion of treatment, they were noted as after treatment (AT).

Table No. 1.7: % of Patients having relief in Various Symptoms

Symptoms	Much Improved	Marked Improved	No Significant Improvement	Skipped	Total No. of Patients
Pain	77.78	14.14	6.06	2.02	198
Stiffness	91.41	1.52	5.05		198
Difficulty in Routine Activity	77.27	9.09	11.62		198

Table No. 1.8: over All Effect of The Treatment

Effect of therapy	Out of 198 Patients	%
Much improvement (85-100%)	163	82.32%
Marked improvement (25-84%)	16	8.08%
No Significant improvement (0-24%)	15	7.58%
Skipped	4	2.02%

❖ **Probable Mode of Action of Arthrothermia:**

It is a combination of *Ksharkarma* and *Agnikarma* treatments described in classical text books of Ayurveda. As we described earlier, when provoked *Vayu* is lodges in *Asthi-Sandhi-Sira-Snayu*, it results in pain and stiffness. So our line of treatment should be the removal of *Vayu* from that Particular site. *Vayu* is *Sheeta* in nature. Heat provided by Arthrothermia procedure, due to its *Ushna Guna*, pacifies the *Sheeta Guna* of *Vayu* and removes it from there. By removal of *Vayu* from affected site, patient gets pain relief.

As per the modern medicine, therapeutic heat increases blood circulation at knee joint leads to the proper nutrition of the tissue. This induced circulation help to flush away pain producing substances from affected site and ultimately reduces the local inflammationⁱⁱⁱ. The heat application is indicated in cases of chronic inflammation^{iv}.

❖ DISCUSSION:

In the present study, 53.95 % patients were of Osteoarthritis (Knee) which shows its higher prevalence in society. Then 19.30% patients of Back pain, 6.14% patient of Neck pain, 6.58% patients of Heel pain and 7.89% patients of frozen shoulder were noted.

In the present study, stiffness reduced much effectively in 91.41% of patients, Pain reduced much effectively in 77.78% of patients while difficulty in routine activity reduced much effectively in 77.27% of patients.

In the present study, percentage of patients with much improvement in symptoms was 82.32%. Moreover in 8.08% of patients experienced marked improvement while 7.58% didn't show significant improvement.

❖ CONCLUSION:

- ❖ Arthrothermia procedure has shown tremendous relief in all types of pain conditions.
- ❖ Pain can be due to *Vata Dosha*. Arthrothermia procedure - A combination of *Agnikarma* and *Ksharakarma* is capable in pacifying provoked *Vata*.
- ❖ Arthrothermia procedure is proved beneficial in treating different type of annoying pain conditions.
- ❖ It has provided better relief than any other treatment available right now for the same.
- ❖ Very convenient and easy method to the patient.
- ❖ It is comparatively affordable, faster and safer process.
- ❖ No side-effects are noted during study.

References

ⁱSushrut Samhita, Sutrasthana 11

ⁱⁱSushrut Samhita, Sutrasthana 12

ⁱⁱⁱMcLean DA. The use of cold and superficial heat in the treatment of soft tissue injuries. Br J Sports Med 1989;23:53-4.

^{iv}Mahajan A, Verma S, Tandon V. Osteoarthritis. J Assoc Physicians India 2005;53:634-41.