



International Research Journal of Ayurveda & Yoga

An International Peer Reviewed Journal for Ayurveda & Yoga



SJIF Impact Factor : 5.69

ISRA Impact Factor : 0.415

ISSN:2581-785X

Research Article

Volume: 3

Issue: 6

Study On The Efficacy Of Hydrotherapy For *Katigraha* In Elderly Population

Manish Mahajan¹ , R.P. Patwardhan²

- 1- PG scholar, Department of Swasthavritta and Yoga , Bharti Vidyapeeth (Deemed to be University) college of Ayurveda Pune
- 2- Professor and HOD, Department of Swasthavritta and Yoga , Bharti Vidyapeeth (Deemed to be University) college of Ayurveda Pune

ABSTRACT

Katigraha is a common complaint encountered in every stratum of society, occupation, and racial groups. It is widely prevalent in these days due to sedentary living habits and hazardous work patterns. In *Ayurvedic* literature we find references regarding *Katishoola*, *Trikashola*, *Trikavedana*, *Katigraha*. In which pain in the low back region forms the main symptom, depending upon the involved area. Hydrotherapy is one of the oldest known therapies. Sebastian Kneipp(1821-97)⁴ believed that water is having the property to dissolve, strengthen and removes the diseased matter from the body and strengthen the body by restoring cleansed blood to the tissues. So by using water in different treatment procedures, one can help to remove the toxic material and to get maximum circulation to that particular area. Hence for treating *Katigraha* water is used to remove the toxic material and to get maximum circulation to that particular area. By which we can relieve the spasm of muscles and the main symptoms of *Katigraha* which includes restricted spinal movements. This paper reports randomised clinical study evaluating the effect of hydrotherapy. The selected patients were thoroughly examined subjectively, detailed general history and physical examination findings were noted. Hydrotherapy has a significant effect in reduction of *ruja*, and different movements flexion, extension, left and right lateral movements.

Keywords: Hydrotherapy (hot lumbar pack and hip bath), *Katigraha*

Article received on-27 May

Article send to reviewer on-1 June

Article send back to author on-18 June

Article again received after correction on -21 June

Corresponding Author : Manish Mahajan, PG scholar, Department of Swasthavritta and Yoga , Bharti Vidyapeeth (Deemed to be University) college of Ayurveda Pune, Email, ID- manishraj3585@gmail.com

How to Site the Article : Manish Mahajan, R.P. Patwardhan, Study On The Efficacy Of Hydrotherapy For *Katigraha* In Elderly Population, IRJAY, June: 2020 Vol- 3, Issue-6; 54- 62

INTRODUCTION

Low back pain is a common complaint encountered in every stratum of society, occupation, and racial groups. It is widely prevalent in these days due to sedentary living habits and hazardous work patterns. Lower back pain is one of the major disabling health conditions among older adults aged 60 years and above. While most causes of Lower Back Pain among older adults are non-specific and self-limiting. In *Ayurvedic* literature we find references regarding *Katishoola*, *Trikashola*¹, *Trikavedan*², *Katigraha*³.

However, recent studies have revealed that Lower Back Pain remains ubiquitous among older adults at their retirement ages. In population-based studies, 1-year prevalence of Lower Back Pain in community-dwelling seniors ranged from 13 to 50% across the world. Similarly, while up to 80% of older residents in long-term care facilities experience substantial musculoskeletal pain and one-third of these (25 to 30%) cases are of Lower Back Pain.

Imperatively, untreated or undertreated older adults with lower back pain may result in sleep disturbance, withdrawal from social and recreational activities, psychological distress, rapid deterioration of functional ability and falls. These lower back pain related consequences may compromise their quality

of life and increase their long term health care expenses.

The conventional treatments in *Ayurveda* include *abhyanga*, different types of *swedana*, *basti* for varying periods along with internal medications aimed at controlling of *kupita Vata*. These methods are effective to control *vatha* and reducing pain.

Naturopathy incorporates drug less therapy by utilizing the principles of *Panchamahabhutas* adopted for different treatments. In this aspect, it can be considered as a part of *Ayurveda* as *Panchamahabhuta siddhanta* is accepted in *Ayurveda* also. So by using water in different treatment procedures, one can help to remove the toxic material and to get maximum circulation to that particular area.

Hence for treating *Katigraha* water is used to remove the toxic material and to get maximum circulation to that particular area. By which we can relieve the spasm of muscles and the main symptoms of *Katigraha* which includes restricted spinal movements. Hence a study was designed to treat *Katigraha* by hydrotherapy in elderly population.

AIM AND OBJECTIVES

- To evaluate the therapeutic efficacy of hydrotherapy in *Katigraha*.

MATERIALS & METHDOLOGY

Type of Study: Clinical study (single group study with pre & post test design)

Period of study: 45 days

Ethical committee Ref No.- BVDU/Exam/ 1927 /2018-19

- Sample size: 30 patients
- Hydrotherapy- Hot water lumber pack, hip bath.
- Timing: daily –morning 7 a.m. to 9 a.m.
- Methods: The total time for the procedure for the hot water pack is 15 min.
- Duration of hip bath-15 min
- Duration of the treatment: 21 days
- The total period of study: 45 days

Hydrotherapy procedure:-

HOT LUMBAR PACK (SOP)⁵

Procedure-

The application is made the same as for the hot and cold abdominal pack, except that the hot bag is applied over the lumbar region. A large square bag was used for this purpose. Care has been taken to apply the heat over the left kidney, as there was direct

communication between the left renal vein and portal system.

1. The desired effect is for the heat to penetrate down into the muscles. Just increasing the temperature of the skin will do little to decrease discomfort. “Warm” is the proper temperature.
2. The heat source should not be hot to the point of burning the skin.
3. In many instances, the longer the heat is applied, the better. The duration that one needs to apply the heat, though, is based on the type of magnitude of the injury.
4. For a minor back tension, short amounts of the hot lumbar pack are sufficient (such as 10 to 20 minutes).

Hip bath(SOP)⁶

1. A hip bath is a mode of treatment that involves only the hips and abdominal region below the navel.
2. A special type of tub use for the purpose
3. The tub was filled with water in such a way that it covers the hip and reaches up to the navel when the patient sits in it.
4. Generally, 12 to 15 lit water was required. This bath was generally taken for 8 to 15 minutes

5. Procedure for data collection:

- Patients from BVDU Ayurved hospital OPD and IPD were selected.

- Special clinical proforma regarding this study was prepared and observations were noted.
- Written informed consent of patients as per ICMR guidelines was taken prior to enrolling in the clinical trial. Findings were recorded periodically during the trial

Inclusion Criteria:

- Patients presenting with *lakshana* of *Katigraha* (lower back pain) were included in the present study.
- Patients of either sex aged between 60 to 80 years were included in the present study.
- Diagnosed cases of *Katigraha*(lower back pain) with mild to moderate severity and willingness to undergo hydrotherapy were included in the present study.

Exclusion criteria

- Secondary causes of lower back pain i.e. fracture, any surgical condition etc. were excluded from the present study.

- Individuals having T.B of the spine, bamboo spine, spondylitis, malignancy, accidental cases, handicapped etc. were excluded.
- Patients with degenerative changes were excluded from the study.
- Patients with chronic back pain were excluded from the present study.
- Patients contraindicated for hydrotherapy were excluded from the present study.
- Patients suffering from any other systemic disease were excluded from the present study.

ASSESSMENT CRITERIA:

The improvement has been documented and assessed through the statistical method. The selected patients were thoroughly examined subjectively, detailed general history and physical examination findings were noted. The subjective parameters including *Graha*, *Ruk* etc. were analyzed and graded from 0-2 mark.

SUBJECTIVE PARAMETERS

- **Flexion**
- **Extension**
- **Left lateral movement**
- **Right lateral movement**
- ***Ruk*(Pain)VAS**

From the above diagram improvement of all parameters can be observed.

Parameter	BT	AT	X	PERCENTAGE	t	P VALUE
<i>Ruk</i>	1.9	0.433333	1.466667	77.19%	14.06	0
Flexion	1.366667	0.4	0.966667	70.73%	8.61	0
Extension	1.4	0.466667	0.933333	66.67%	9.815	0
Left lateral	1.366667	0.433333	0.933333	68.29%	7.393	0
Right lateral	1.4	0.466667	0.933333	66.67%	9.815	0

Table Showing Overall Result

From above diagram improvement of all parameters can be observed.

RESULTS

The differences in the mean values were found to be significant before and after treatment and 1st follow up, 2nd follow-up, 3rd follow up.

Hydrotherapy has a significant effect in reduction of *ruja*, and different movements flexion, extension, left and right lateral movements. In *ruk* 77.19%, flexion 70.73%, extension 66.67%, left lateral 68.29%, right lateral 66.67%.

DISCUSSION

Age-wise discussion

The study showed, age wise distribution of maximum number of patients i.e. 19 (63.33%) in the age group of 60-65 years, 08 (26%) in the age group of 65-70 years and minimum i.e.03 (10%) were in the 70 and above age group.

Gender wise discussion

Gender wise distribution of patients in the present study showed maximum no. i.e. 19 (63.33%) male patients and 11 (36.66%) female patients. Thus, the incidence rate in males was higher as compared to female patients. This shows because of the heavy working structure more males are suffering from *Katigraha*.

Ahara wise discussion

Ahara wise distribution of patients in the present study showed maximum no. i.e. 19 (63.33%) patients having a vegetarian diet whereas 11 (36.66%) patients were consuming a mixed diet. This shows patients having a veg diet are suffering more with *Katigraha*.

Prakriti wise discussion

In the present study, *prakriti* wise distribution showed maximum number of patients i.e. 14 (46.66%) having *vata pitta prakriti*, 09 (30%) patients were of *vata kapha prakriti*, 04 (10%) patients were of *pitta vata prakriti* 02 (6.66 %) patients were of *pitta kapha prakriti* and 01 patient having *kapha vata prakriti*. This shows *vata dosha* is supposed to be one of the important etiological factors in the causation of *Katigraha*.

Vyayama wise discussion

Vyayama wise distribution of patients in the present study showed maximum no. i.e. 12 (40.00%) patients were not performing any kind of *vyayama* whereas 08 (26.66%) and 10 (33.33%) patients had an occasional and regular habits of *vyayama* respectively. This shows that the patients who are not doing any type of *vyayama* are more prone to *Katigraha*.

Effect of Hydrotherapy on *ruk*, flexion and extension

- Buoyancy effect:-The buoyancy effect eliminates the effect of gravity and allows for more freedom and comfort of movement of joints and muscles.
- Temperature and pressure of water in hydrotherapy can block nociceptors by acting on thermal receptors and mechanoreceptors and exert a positive effect on spinal segmental

mechanisms, which is useful for the painful conditions.

The pressure of the water helps to eliminate oedema (fluid swelling) in the tissues. The pressure also tends to release endorphins, the pain-killing substances released in the body.

- Hydrotherapy stimulates the sweat glands, eliminating waste from the body.
- Hydrotherapy helps in improving the mobility of the spine i.e. flexion, extension and lateral movements by reducing the pain and muscle spasm. increasing the joint range of movement and muscle strength by using buoyancy to stretch.
- Hydrotherapy helps reduce joint stiffness by allowing more comfortable movement, encouraging joints to move through the range and therefore improving circulation and reducing swelling.

Mode of action

- **Mode of action of hydrotherapy on *Katigraha***
- By acting locally on injury tissues, lessening inflammation and oedema and diminishing reflex muscle spasm, it helps reduce pain.
- By improving the blood supply, repair and healing is accelerated.
- By eliminating the effect of gravity, the pressure is removed from the disc and joints,

and stress on the supporting muscles and ligaments is lessened.

CONCLUSION

Hydrotherapy can help in two aspects as Preventative by generally reducing the effects of stress, tension and toning the spinal muscles, the risk of injury is lessened, secondly.

Curative aspect- by acting locally reducing inflammation and diminishing reflex muscle spasm, reducing pain, improving the blood supply which accelerates repair, healing and pressure is removed from the disc, joints, and stress on the supporting muscles and ligaments is lessened.

In the present study, it is concluded that the use of hydrotherapy in the form of hot lumbar pack and hip bath showed significant results in relieving the symptoms of *Katigraha*.

Acknowledgement :- Nil

Financial Assistant :- Nil

Conflict of interest :- Nil

REFERENCES

- 1) Shri Bhashagranatha Pandit, Shri Brahma Shankar Mishra, Bhava Mishra, Bhava Prakasha with Hindi Commentary by Pg. 24 : 115
- 2) Chakrapanidatta Charaka (2000), Charaka Samhita With 'Ayurveda Dipika', Varanasi, Chowkambha, Surabharati Prakashana, Chikitsa Sthan 28: 26
- 3) Dr. Ganesh Krushna garde, Ashtang Hriday Varanasi, Chowkambha, Surabharati Prakashana, Sutra Sthan. 15 : 07
- 4) Kneipp, Sebastian (1894-01-01). My Water-cure: Tested for More Than 35 Years and Published for the Cure of Diseases and the Preservation of Health. J. Koesel.
- 5) Kellogg, John Harvey (1876). Rational Hydrotherapy Part III, p. 812
- 6) Kellogg, John Harvey (1876). Rational Hydrotherapy. Part III, p. 769