



Therapeutic Benefits of Naturopathy Douches in Hydrotherapy

N. Vijayaraghavan ^{a*†#} and V. R. Dhillip ^{a*†°}

^a JSS Institute of Naturopathy and Yogic Sciences, Coimbatore, Tamil Nadu, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JOCAMR/2022/v17i430337

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/84371>

Mini-review Article

Received 07 February 2022
Accepted 17 April 2022
Published 23 April 2022

ABSTRACT

Naturopathy is an “*alternative medicine*” which doesn't belong to any medicine. Nature itself comprises five major elements which are space, air, fire, water, and earth. Hydrotherapy or water therapy is one of the universal solvents having an immense impact on the human body and most ancient of all remedial agents for acute, sub-acute, and chronic disease conditions. Water treatments has the ability to reduce all disease condition such as traditional douches treatments are very simple, cost-effective, and efficient treatment with water temperature, and vapor used in various diseases. A douche consists of a single or multiple columns of water directed towards some portion of the body especially in reflex areas to produce sedative effects. These types of treatment therapeutic actions are based upon three factors i.e., temperature, pressure, and mass. A douche has various types, effects, and therapeutic benefits which are highly useful in the treatment of various diseased conditions. This paper highlights and overviews the therapeutic uses of douches as therapy and their important role in modern ailments.

Keywords: Naturopathy; douches; holistic medicine; derivative, Hydrotherapy

[†]Dr;

[#]Assistant Professor;

[°] Principal & CMO;

*Corresponding author: E-mail: raghavanbnysmd@gmail.com, raghavnbnysmd@gmail.com;

1. INTRODUCTION

Hydrotherapy (or) Balneotherapy is the use of water to facilitate healing and exercise and to enable patients to achieve therapy goals [1]. Numerous therapeutic practices can be grouped under the umbrella term "Complementary and alternative medicine" [CAM]. The term is often used interchangeably with such terms as "Natural therapies", 'holistic medicine' and 'complementary medicine'. Naturopathic medicine is a branch of the Indian system of medicine that basically (water-based therapies, herbal therapies, kinesiology, reflexology, iridology, reiki, magnetotherapy, Heliotherapy, etc.).[2] Hydrotherapy is the external and internal use of water in any of its forms (water jets, douches, sprays, Packs, baths) for health prevention or treatment of various diseases with temperature, pressure, mass, and enable with duration and time in a particular region to produce analgesic effects. It is one of the naturopathic treatment modalities used worldwide in countries like India, Egypt, China, Germany, etc. [3]. Though traditional countries used water to produce therapeutic/physiological effects on a different part of the organs for maintaining health preventive measures and treating diseases with the evidenced therapeutic method. Many studies/reviews that reported among physiological or therapeutic effects of water-based therapy, but douche therapy related to action, effects, and other mechanisms are not overviewed.

Douche is a stream of cold/Hot/Alternate water or vapor directed against the body generally or locally, there are many types at all temperatures. Kellogg's treatment method used external douches. If it is an internal application of water-based therapy, it is called irrigation [4]. General measures of hydrotherapy superficially cold water application may produce physiological effects such as decreases in local metabolic function, local edema, nerve conduction velocity, muscle spasm, and an increase in local anesthetic effects [5].

1.1 Physiological Adaptations and Pertinent Properties of Water

The effects and warmth of water depend on a temperature framework of about 80-92° F to work together to produce a physiological effect. The therapeutic benefits depend on intensity and duration of water either Hot, very hot, cold, very

cold, and Neutral [6]. There are six properties of water that must be understood in order to develop a water-based therapies looking for relative density (*specific gravity of water and its ability to float*), Buoyancy, Hydrostatic pressure, viscosity, and Cohesion (tendency of water molecules) and moment of force [7].

1.2 Effects and Benefits of Hydrotherapy

EFFECTS: 1. Increased circulation to the muscles, 2. Increased heart rate, 3. Increased respiratory rate, 4. Increased metabolism, 5. Decreased sensitivity of sensory nerve endings, 6. General muscle relaxation [8].

BENEFITS: 1. Decreased pain and joint effusion, 2. Improved range of motion and flexibility, 3. Increased strength and coordination, 3. Improved ease of ambulation and activities of daily living, 4. Improved mood and feeling of well-being [9].

1.3 General Application of Douches and Its Classification



Fig. 1.

In general action of douches, the range of temperatures employed from 45⁰ to 125⁰ F. The pressure ordinarily employed is from 10 to 60 pounds, represented by a water column of 25 to 150 feet. The pressure and mass vary greatly according to the region in the body to a desire. or e.g. Single horizontal jet-a nozzle with an aperture of one fourth to three-eighths of an inch are commonly employed for the pressure, mass may be easily regulated the finger placed in the water column near the mouth of the nozzle thus breaking or dispersing the stream of water to the body region and to regulating pressure in regular hydiatric pressure [10].

The douche apparatus should be constructed with a pipe of sample size (at least one and a half inches in diameter) and should be directly

connected with the sources of both cold and hot water, the connections being so arranged to use hot and cold water has to establish the variation of water temperature delivered to the apparatus and adjusted for during application of treatment mode. An accurate pressure gauge and thermometer should be connected with the apparatus if the pressure and temperature are accurately determined. In the action of application of douches, the most efficient and important form is with temperature, pressure, and alternation if required for the treatment [11]. Kellogg's classification and its method of douches are classified according to their form as the cold, hot and neutral

1.4 General Review of Hydrotherapy

According to a systemic study by Neil D. Black in 1936, the value and application of hydrotherapy treatment in a hospital concluded on water tonic and stimulative hydrotherapy measures shower and scotch douches followed by Ultraviolet rays show the significant result in psychoneuroses and depressions [13].

A Pragmatic controlled trial study was conducted on Hydrotherapy as a recovery strategy after exercises were assigned as experimental therapy of hydrotherapy in a group, outcome measures were including blood pressure, HR, handgrip strength, self-perceived fatigue, and body temperature were also assessed and it concluded that supportive methods of water-based therapy are an adequate strategy work to facilitate cardiovascular recovers and perceived fatigue and weakness [14].

Water-based therapies may have some short-term benefits to passive range of mobility in rehab after RCR [15]. Spa water at 37^o c and tap water heated to 37^o C for the duration of 20 minutes in a day for 5 days/week for the period of 2 weeks with home-based program improved the clinical symptoms and quality of life in patients with OA of the knee. However, pain and tenderness statistically improved in spa water-based therapy when compared with tap water therapy [16]. It may be due to spa waters are not only natural warmth, but it contains minerals that may produce a significant effect. Spa water therapies at a temperature of 37^o C have properties of mechanical, thermal, and chemical effects.

A meta-analysis of douches increases the overall risk of PID (pelvic inflammatory disease) by 73%

and the risk of ectopic pregnancy by 76%. The frequent douching spray was highly reduced with PID [17]. According to Bruce et al., 2000 a douching may facilitate the ascent of microorganisms in the UGT resulting in chronic bacterial colonization inside the uterus. During the women's pregnancy, the host inflammatory response is in uterine chronic bacterial colonization which stimulates preterm birth [18]. In 1983, a study was conducted on experimental monitoring effects of hand and foot douches on peripheral circulation (artery, vein, lymphatic) after overall assessments were done on more than 200 patients. The treatments of thermal effects significantly improved and relieve vascular spasms in the limbs and reduce the threshold of sympathetic excitability [19]. In another study on the Impact of water therapy on pain management in FMS, current perspectives have recommended that water therapy is recommended as a nonpharmacological therapeutic approach in the pain management of FMS patients, improving pain, fatigue, and quality of life [20].

1.5 General Classification, Physiological and Therapeutic Uses of Douches

A stream of temperature water directed against the body generally or locally, with many types and uses at various temperatures, and Kellogg's method of application is used only for external douches with cold, hot, neutral, horizontal, scotch, alternative douche, etc.,

2. COLD DOUCHES

A temperature of 12 to 21^oc was preceded by shower naps and used percussion to enhance reaction in feet and legs later chest the spine as well. The effects are therapeutically benefits of fluxion and derivative effects.

3. HOT DOUCHE

The temperature of the water employed may vary from 100o to 130o.the duration of 15 to 30 seconds to 4 to 5 minutes. It is very largely used for relief of pain; little pressure is commonly employed. Physiologically douches of hot are very exciting, later relaxing, depressant or sedative, and mechanical effects. Excitation of the vasomotor centers is produced by the impact of water when pressure is employed when it is transient and followed by an atonic reaction. A general hot douche with very

light pressure is useful in relieving superficial pain, hyperesthesia, neuralgia, and paraesthesia [21].

4. NEUTRAL DOUCHE

Temperature of 92 to 97 °C with the duration of 2 to 30 minutes, pressure from 2 to 20 pounds according to Kellogg's the effect is desired. The neutral douche physiologically offers an advantage over the hot and cold douche as a derivative measure and is capable of relieving congestion of skin without provoking preliminary congestion of the brain and internal visceral and without exciting thermic reaction. Therapeutically Neutral douches (92 to 97°C) to the back of the spinal column are one of the most efficient in reflex excitability of spinal centers and also very useful in general nervous irritability as a means of relieving hyperesthesia of the skin disease like dermatitis, itching and general neuralgic conditions.

5. HORIZONTAL JET

It is most useful and generally employed by all kinds of douches. Jet douche consists of single-stream varying in diameter from a millimeter or less to an inch or even more. This jet is applied by a nozzle, attached to a piece of rubber tubing two or three feet in length to permit pressure and movement. The effect of this douche which will increase the powerful excitant in the nervous system by means of pressure of water cessation acts as a powerful reflex effect is produced by stimulation of various sets of nerves which is recognized by temperature, pressure, pain, and tactile sensation. Therapeutically this type of water jet will excite the people suffering from bright's disease, gastric ulcers, spinal sclerosis and mot organic infections etc.,

6. SCOTCH DOUCHE

It is mean of application by hot water followed by a short cold application. These types of douches are greatly intensified the derivative or revulsive effect of hot water and increase its duration. In the scotch douche, the stream of application will be any form of jet/spray or percussion douche but therapeutically employed with spray douche. Physiologically shorter hot water gives a passive dilation of cutaneous vessels with increased heart action and elevation of blood pressure with reflex action or influence it turns to atonic reaction. Localized therapeutic effects of scotch douches are very useful in lumbago, sciatica, neuralgia, pleuritic pains, and spinal irritation.

7. REVULSIVE DOUCHE

The douche is based upon the scotch douche employed with suppressing the thermic reaction which follows the ordinary cold douche. The revulsive compress first administered by a hot douche at a high temperature as individuals can bear temperature tolerance is until reaches a temperature 122° or even 130° when the applied area with a duration of 2 to 4 minutes or the skin acquires a dusky-red or cherry colour. Physiologically, this procedure is exclusive for the circulatory system and is not for mechanical effects. To the large extent this type of douche is would store blood in the skin and draws blood from internal parts.

When, therapeutically administered general effects will be metabolic changes, cardiac insufficiency, chronic gastritis, Congestion in the liver and spleen, acute congestion and inflammation of the Uterus. It is also a valuable measure in cases of both profuse sweating and excessive dryness of the skin [21].

8. ALTERNATE DOUCHE

This type of therapeutic douches resembles both hot and cold-water application with the duration of first hot for 3 sec to 3 minutes and then cold application 4 seconds to 5 minutes are repeatedly applied in alternation. Physiological variation which perhaps the most exciting of all hydiatic procedures. It combines with primary and secondary excitant of heat and secondary excitant effects with cold alternatively to remove the heat accumulated by the skin. In alternative douches therapeutically employed with powerful excitant effects are desirable in cases such as exudations, liver dyspeptics, stiffened joints, chronic bright's disease and muscle weakness & soreness.

9. MASSAGE DOUCHE

J.H. Kellogg's type of massage douche is a mixed procedure with kneading movements of massage are executed at the same time that a stream of water is allowed to the body surface and also associated with strong intermittent pressure with palmar kneading and kneading with the thumb and fingers. Physiological massage douche should be employed with low temperature begins most powerful tonics and mechanical effects of all hydiatic procedures, especially with horizontal douche at high pressure, temperature (hot, cold) and mass. In therapeutic benefits of cold massage, it acts as a

powerful alternative and tonic. It is useful in the application of conditions like lumbago, sciatica, and Insomnia [21].

10. CONCLUSION

Based upon available references and general reviews of hydrotherapy. Water-based therapies act as therapeutically administered for the management of pain, chronic destructive condition in joints and bones, strengthening of muscle groups by pressure, localized condition, etc.. It also acts as physiological variations in various systems to enhance the mechanical and hydriatic effects of water-based therapies in order to enhance derivative, revulsive and restorative effects. Due to the lack of evidence further general hydrotherapy studies to measure in research evidence to find out the clinical effects, as well as therapeutically purpose on various diseases.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Elaine L, Bukowski; Thomas P.Nolan. The use of water as a therapeutic agent. 5th chapter, Sixth edition, Philadelphia PA.2016.P.6
2. Vivian Lin, Alan Bensoussan Stephen P, Myers et al. The practice and Regulatory Requirements of Naturopathy and Western Herbal Medicine. School of public health, L Trobe University, Nov.2005, p.2.
3. Felming SA, Gutknecht NC. Naturopathy and the primary care practice. Prime care.2010; 37:119-36. [PMCID: PMC 2883816] [Pub med: 20189002]
4. J. H. Kellog. Rational Hydrotherapy. A manual of physiological and therapeutic effects of Hydriatic procedures and techniques. Published by NIN.2nd edition.2005;1002:426.
5. Wetson M, Taber C, Casagrande L, Cornwall M. Changes in local blood volume during cold gel pack application to traumatized ankles. J Orthop Sports Phys Ther. 1994;19:197-199. [Pubmed: 8173566]
6. Leslie Erin Korel. The properties of water and their effect on aquatic therapy. Athletic therapy today.1996:34-36.
7. Collender, Leslie E. The properties of water and their effect on aquatic therapy: Athletic therapy today.1996:35-36.
8. Haralson. The water properties, relative density and human kinetics. Athletic therapy today.1996:37-38.
9. Leslie Erin Korel. The properties of water and their effect on aquatic therapy. Athletic therapy today.1996: 36-37.
10. Kellog JH. Rational Hydrotherapy. A manual of physiological and therapeutic effects of Hydriatic procedures and techniques. Published by NIN.2nd edition.2005;1004:426-427
11. Kellog JH. Rational Hydrotherapy. Techniques of hydrotherapy. Published by NIN.2nd edition.2005; 1003: 426-427.
12. J. H. Kellog. Rational Hydrotherapy. A manual of physiological and therapeutic effects of Hydriatic procedures and techniques. Published by NIN.2nd edition.2005; 1005:428.
13. Black N.D. The value and application of hydrotherapy in a mental hospital.Psyc Quar.1936; 34-44.
14. Antonia cuesta vargas, Alvaro Trave Mesa. Hydrotherapy as a recovery strategy after exercise: A pragmatic controlled trial. BMC Complementary and Alternative Medicine.2013; 13:180.
15. Hay L, Wylie K. Towards evidenced based emergency medicine: best BETs from the Manchester royal infirmary: hydrotherapy following rotator cuff repair. Emerg Med J.2011; 28:634-635.
16. Yurtkuran M, Alp A, Nasircilar A, Bingol U, Altan L, et al. Balneotherapy and tap water therapy in treatment of knee osteoarthritis. Rheumatol Int. 2006;19- 27.
17. Zhang J, Thomas AG, Leybovich E. Vaginal douching and adverse health effects: A meta-analysis. American Journal of Public Health. 1997;87(7):1207-1211.
18. Bruce F C, Fiscella K, Kendrick J S. Vaginal douching and preterm birth: An

- intriguing hypothesis. Medical Hypotheses. 2000;54(3):448-452.
19. Garreau C. Experimental Monitoring of the effects of hand and foot douches at Barbotan on peripheral circulation. Phlebologie. 1983;36(3):265-270.
20. Antonio RZ, Carolina PA, et al. Impact of water therapy on pain management in patients with fibromyalgia-current prospective. Journal of Pain Research. 2019;12:1971-2007.
21. Kellogg JH. Rational Hydrotherapy. A manual of physiological and therapeutic effects of Hydratic procedures and techniques. Published by NIN. 2nd edition. 2005;1027:446-447,465,470-471.

© 2022 Vijayaraghavan and Dhilip; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/84371>