

Health Benefits of Hydrotherapy in Osteoporosis

Rahul A Hajare,

¹Post Doc Fellow Indian Council of Medical Research New Delhi, India.

Corresponding Author: Rahul A Hajare, Post Doc Fellow Indian Council of Medical Research New Delhi, India,

E-mail: rahulhajare@rediffmail.com.

Received date: July 13, 2018; **Accepted date :** July 20, 2018; **Published date:** July 21, 2018.

Citation this Article : Rahul A Hajare, Health benefits of hydrotherapy in osteoporosis, J Orthopaedics and Surgical Sports Medicine,

Doi: 10.31579/2641-0427/004

Copyright : © 2018 **Rahul A Hajare**. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Introduction

Weak bones are fragile. In such cases, even the smallest shock to the body caused by a minor fall or sudden movement can cause a serious fracture. An adequate and healthy diet plays a crucial role in strengthening the human skeletal system. India is home to over 190 million undernourished people and only next to China in the number of obese people. This state of diet and nutrition is a perfect scenario for high incidences of osteoporosis. Osteoporosis, which means porous bones, is a disease that, at times, is confused with osteoarthritis. The two are very different. Osteoarthritis is caused by degeneration of the joints, while osteoporosis causes thinning or weakening of bones, making them highly fragile and increasing the vulnerability to multiple fractures. Even the smallest shock to the body caused by a minor fall or sudden movement can cause a serious fracture. A silent disease, it does not readily show any symptoms. It is quite possible that people might not be aware of being affected by the disease until they suffer a painful fracture. The weakening of the bones is gradual, as bone mass density begins decreasing from the age of 35 years. Women are more at risk of osteoporosis, as the bone mass in their body decreases at a faster rate than in men. Around the world, it is estimated that one in three women compared to one in five men older than 50 years suffer from an osteoporotic fracture. In women, the reduced estrogen hormone levels after menopause make it tougher for the body to generate more bone. Today, modern lifestyle has increased inactivity. Excessive alcohol and tobacco consumption is another major risk factor. Apart from this, a major contributory factor includes unhealthy dietary practices, which also includes eating disorders such as anorexia and consumption of food deficient in important nutrients such as calcium, magnesium and Vitamin D. Osteoporosis can be prevented, or at least its onset can be delayed, by managing avoidable risk factors and following careful diet management. A diet rich in calcium, protein, magnesium and vitamin D is vital. Include calcium-rich food in your diet; calcium strengthens the bone. Non-fat milk, yoghurt, broccoli, cauliflower, certain fish such as salmon, green leafy vegetables and almonds are all good sources of calcium. Protein-rich foods like lentils, kidney beans, grains, nuts, and seeds help the body to keep the muscles healthy. Healthy muscles support the bones. Consumption of tobacco and alcohol should be reduced as much as possible. Red meat and caffeine intake should also be reduced. Calcium supplements should be taken as prescribed by your doctor.

HEALTH BENEFITS OF HYDROTHERAPY IN OSTEOPOROSIS

1. Reduces muscle tension and relieves pain: The weightlessness you feel when under water relieves tension in the limbs, supporting aching muscles and easing the movement as opposed to when on land. Plus, hydrotherapy stimulates the release of endorphins, acting as a natural pain reliever which will further reduce muscle soreness [1]. Incorporating hydrotherapy as part of your fitness holiday is a great way to recover after a day's training.
2. Rehabilitates injured muscles: Being immersed in warm or hot water raises the body temperature, increasing blood flow around the circulatory system and so alleviating pain. The improved circulation will in turn help to heal injured tissues and rehabilitate damaged muscles or joints.
3. Boosts the immune system: The increased blood flow and circulation of white blood cells around the body allows lymph (an immune system fluid that helps collect and get rid of unwanted materials from the body) to be moved through the body more efficiently and therefore strengthens the immune system [2], helping to fight colds and illnesses.
4. Encourages detoxification: Saunas and steam rooms induce considerable sweating. This is the body's primary way of eliminating toxins and therefore the impurities and toxins are flushed out through the skin helping to detoxify the body.
5. Relieves stress: Hydrotherapy treatment can be effectively used whilst on a distress holiday. Hydrotherapy can help to reduce blood pressure caused by stress. It may also slow down the body's reaction to anxiety and release endorphins - a natural stress fighter [3].

References

1. Stevenson, Angus, ed. "Definition of Water Cure". Shorter Oxford English Dictionary. 2: N-Z (6th ed.). Oxford: Oxford University Press. 2007; p. 3586. ISBN 978-0-19-920687-2.
2. Hydrotherapy – What is it and why aren't we doing it?". International SPA Association. Kansas. 3 October 2009. Retrieved 17 December 2009.
3. Koziar, Barbara; Erb, Glenora; Olivieri, Rita. Fundamentals of Nursing: Concepts, Process and Practice (4th ed.). Redwood City, California: Addison-Wesley. 1991: pp. 1335–1336. ISBN 0-201-09202-6.