

Magnetized Water on Kidney Function

EFFICACY OF A NATURALLY MAGNETIZED WATER ON KIDNEY FUNCTION

Michael Galitzer, M.D., President, American Health Institute on Anti-Aging Medicine, Santa Monica, California, Howard Reminick, Ph.D., Yoshitaka Ohno, M.D., Ph.D., Ohno Institute on Water and Health, Willoughby, Ohio (November 1999)

INTRODUCTION

Water, which makes up over 70% of the body's structure, is the most influential and vital component which provides the body with a mechanism to maintain and restore homeostasis.(1) However, environmental changes have imposed many new pathologic influences, which have overtaxed the body's ability to remain in a state of balance.(2) Among these are toxic drinking water, and soil toxicity and mineral depletion which affect nutritional components in food. 3 The results can be seen in the rise in incidence of chronic, degenerative diseases, which are not successfully treated by conventional medicine.(4,5) In fact, this dilemma has been further compounded by the standard procedure of over-administering medications which present long-term difficulties in the body's ability to maintain its state of balance, or homeostasis.(6,7)

In order for water to be the medium for the body's ability to maintain its health and vitality, it must enhance, not deter bodily functions. Using the premise that if the body is 70% water, a cell 70% water and DNA 70% water, then the quality, content, structure and frequency of the water in the body must be optimal.

Among the many functions demanded of water in sustaining the health and stability of any living organism is its role as a solvent, catalyst and transporter. Water dissolves 80 different proteins, as well as glucose and electrolytes, and transports them to every cell.(8) Water, which composes most of the blood and bodily fluids, is responsible for activating the process in the body which allows bacteria to remain stable. Healthy bacteria, along with healthy water promote digestion, absorption and elimination of waste materials.(9)

Another important fact of physiologic function is the role of magnetism in the body in creating and maintaining an energy field. The body flourishes in an electro-chemical environment, which is activated by its response to magnetism. 10 Electromagnetic energy and the human body have a valid and important relationship.(11) Water which is naturally formed with magnetic properties and reacts with the body's magnetic influence will enhance the way the body maintains a state of balance along with its efficient use of energy.(12,13)

This study was undertaken to test what has been found in several individual case studies and clinical research on the efficacy of a naturally magnetic mineral water discovered in Japan and used with great success by physicians and healers. There are also several reports on medical uses of magnetic water in treating chronic, intractable disorders in Russia, China and Europe. With the rise in acceptance of alternative and complementary approaches to medicine, the theory post-ulated by this study has been found to follow principles being formulated by theories in new medical philosophy, such as those presented by Vibrational Medicine, Bio-Energetics and Energy Medicine. The common message among these quantum scientists is that magnetic energy is instrumental in establishing the body's ability to maximize its vital potential, and water is the key medium in the body for this to take place.(14)

HYPOTHESIS TESTED: Following a regimen of 16 ounces of naturally magnetized mineral water, study subjects will have lower urine pH and greater electrical conductivity in urine, suggesting increased kidney function and less toxicity in cells and tissues.

DESCRIPTION OF STUDY

The study was conducted at the practice of Michael Galitzer, M.D. in Santa Monica, California, between April and October of 1999. Although each subject was tracked for a three month pre/post period, the study period covered six months to allow for new patients during that period to bring the sample to 50. Fifty patients were selected randomly from among all new patients during that period as study subjects from a total of 84 eligible patients. All of these patients presented with a variety of chronic, intractable medical problems. Twenty-five were randomly assigned to the Experimental Group and 25 to the Control Group. Testing on the BTA was done as part of the patient care assessment procedure.

All patients under Dr. Galitzer's care are informed during initial visit after assessment is done and treatment regimen is established that they must commit to drinking 6-8 glasses of bottled water every day in order for the prescribed remedies to be effective. Subjects in the Experimental Group were given 90-16 ounce bottles of the experimental treatment, one bottle to be consumed per day for 90 days, as part of their required daily consumption. The Control Group drank only bottled water sold commercially.

Dr. Galitzer did not discuss the experimental treatment water with the subjects at any time during the study, other than to reinforce compliance of 6-8 glasses of water per day with both groups, unless questions arose. He did not discuss the study with any of the subjects during regular office visits.

The purpose of the study was to determine the efficacy of the experimental treatment (naturally magnetized mineral water) in improving kidney function. Each of 50 subjects was pre-tested with the Biological Terrain Assessment (BTA) on measurements of (1) urine pH and (2) resistivity (R) - concentration of mineral salts in urine. Post study measurements were repeated each subject after three months.

Although past studies have provided evidence that this water seems to react differently in the body from any other water tested by the Investigator, measurements have never been taken on the indicators tested in this study. Therefore, the magnetized water was further tested to determine if it can consistently create a positive change for anyone whose body is acidic and suffers from a chronic, intractable disease. Therefore, it did not seem necessary to establish like groups as to age, sex and medical condition. It seems that the more random the subjects the more credible the results should be. If this water deserves serious attention as an important health product, then it must be tested in further controlled studies.

Prior to the study, subjects in the Experimental Group were given information about the experimental treatment (magnetized mineral water) and a Fact Sheet about the study and the protocol. Prior to the study each Experimental Group subject was given a Consent to Participate and Release of Information form, and a Medical History form, which was completed, signed, and placed in individual files. A Report Form was also placed in each file, which was to be completed at the end of the study by Dr. Galitzer and the subject. A pre and post computerized printout of the BTA analysis was also placed in each file of both groups. This provided the raw data to be analyzed and reported.

Description of Subjects: The sample of 25 subjects in the Experimental Group consisted of 16 Males and 9 Females. Mean age was 53 years, 4 months. The 25 subjects in the Control Group consisted of 6 Males and 19 Females. Mean age was 57 years, 4 months. All subjects were being treated with homeopathic remedies and followed medically by Dr. Galitzer. Subjects and their medical problems are listed with their pre and post measurements in the Results section of this report.

DESCRIPTION OF THE TREATMENT

The treatment applied to the subjects was a daily regiment of 16 ounces of a naturally magnetized water which has been imported from Japan and under study with chronic, intractable diseases for the past five years. This water is located and naturally formed in a mountain in Japan which is permanently magnetized as a result of a sea volcano and a massive meteorite shower, which occurred within the same period over 500 million years ago. It contains 74 minerals.

Three natural conditions are created in this magnetic environment which give this water its unique qualities. First, it contains a balance of essential minerals, many of which are not found in any other water source. This includes trace minerals which have been depleted in soil and drinking water because of environmental changes. Second, its natural magnetization allows molecules to be more highly organized in structure and movement, forming smaller clusters which are more easily absorbed and utilized by cells. Third, it has a slightly higher alkaline pH, between 7.60 and 7.80, which helps keep blood from becoming acidic.

Living cells are tied together by a matrix of water molecules. Like the atoms that compose them, they are tied together by ionic bonds consisting of positive and negative charges on their outer surfaces. In order for water to form ordered, structural energy bonds around cells, there must be active magnetic influence present. Water molecules lose order when they are not adequately magnetized. Inadequate magnetized molecules will disrupt hydration around them, creating disorganized movement for both the cell and the surrounding water.

Magnetism takes place when electrons orbit around their atoms. The electrons circling around atoms resist attempts to disturb their usual orbits so they can create their own magnetic fields. If neighboring electrons are made to spin so their poles are aligned in the same direction, the cell becomes magnetically-activated. This allows a cell to remain structurally and functionally sound and resist disease.

METHOD OF MEASUREMENT

The Biological Terrain Assessment (BTA) is a new approach to health testing, which has undergone vigorous research for validity and reliability.⁽¹⁵⁾ It is designed to analyze the "Deep Health" of the body by measuring indicators of cell electrochemistry and stability through blood, saliva and urine samples. It provides early evidence of biochemical imbalances in the body. It does not diagnose disease, but establishes weaknesses in the body's internal environment.

The origins of the BTA can be traced to the work of French hydrologist, Professor Louis Claude Vincent. He was commissioned by the French government in the 1950's to investigate why different areas of France had different incidences of cancer. After extensive study, he concluded that there was a direct correlation between the soil in an area and its water supply, and cancer. This led to the development of a device in Germany that could measure the blood, urine and saliva biochemistry. This was followed 20 years later in America by the BTA.

The BTA measures the ability of kidneys to remove wastes from the blood. As the cells and tissues in the body become more acidic, the blood and saliva become more alkaline. Also, as the cells become more acidic, the body tries to rid itself of acids via the kidneys and the creation of an acidic urine. Conventional medicine has determined that the normal range of urine pH is 4.5 to 8.0. This is too large a range. The first morning urine should be acidic (5.00 to 5.99) in a person with cellular acidity. Inability to acidify the first morning urine results in acids being unable to leave the body easily, ultimately creating long-term health problems. Therefore, the ability of the kidneys to produce an acidic urine is essential to maintaining health.

For the purpose of this study, the following BTA indicators were measured:

1. **Urine pH** The pH (acid/alkaline balance) is measured on a scale of 0 (maximum acidity) to 14 (maximum alkalinity), with 7 being neutral. All body fluids, including blood, must remain at normal levels or cells lose the ability to remain balanced. The body continually struggles to keep the pH of various body fluids at proper levels. However, normal metabolic reactions, compounded by toxicity which enters the body in chemicals found in drinking water and food tend to produce higher acidity. Health deteriorates as cells become more and more acidic. The liver is the first organ which intercedes to de-acidify the body. When it is overworked, the kidneys become involved, as are the stomach, skin, lungs and colon. The BTA measurement of urine pH can indicate if our body is too acidic. Acidic urine indicates that the kidneys are removing acidity from tissues.
2. **Urine Resistivity.** Urine resistivity is an indicator of how effective the kidneys are in removing waste materials from blood. As the concentration of minerals increases, the resistivity decreases. The reverse is true when the concentration of minerals decreases, resulting in a less dilute urine, contributing to a weakened state of health. The BTA measures resistivity as indicated in urine in r units (Ohms).

RESULTS

ANALYSIS OF DATA: The study was conducted to determine if ingestion of magnetized water would lower urine pH, indicating removal of acidity from tissues. Results of the post study analysis found a significant increase in urine acidity in the Experimental Group, compared to the Control Group. This suggests that a daily regimen of naturally magnetized water was effective.

Mean pre-study urine pH for the Experimental Group was 6.54, compared to 6.86 for the Control Group. The mean post-study urine pH was 5.86 for the Experimental Group, compared to 7.02 for the Control Group. This is a very significant difference (12%). It should be noted that while the Experimental Group was able to achieve a lower urine pH, the urine pH of Control Group actually increased, which provides evidence that the naturally magnetized water used in this study stimulated the kidneys to acidify urine, allowing the kidneys to remove acids from the tissues through the urine.

Also measured was urine Resistivity (R). Urine R correlates well with Urine Specific Gravity. Resistivity is the inverse of conductivity, and thus is directly related to the ability of the kidneys to excrete a toxic load of mineral salts. The lower the urine resistivity, the greater the toxic load being excreted. Ideally, as many toxic materials as possible should be excreted in the first morning urine.

There was also a major reduction in urine R in the Experimental Group, compared to the Control Group. The ideal R score is 30-45. The Mean pre-study R for the Experimental Group was 112. The Mean post-study score was 77.32. This is also a significant improvement (31%). The Mean pre-study R for the Control Group was 156.16. The Mean post-study R was 137.36. Although this showed a reduction in urine R, these values are still extremely elevated, indicating persistence of reduced mineral salt excretion. (Figure 1)

Figure 1 RESULTS OF BTA URINE pH and RESISTIVITY ANALYSIS

EXPERIMENTAL GROUP

N=25 (M= 16 F= 9) X Age = 53 Years, 4 Months
 pH (Urine) Range: (Pre) =5.17 - 7.72 (Post) = 4.80 - 7.03

--

X (Pre) = 6.542 X (Post) = 5.859 X (Difference) = - 0.683
 This is a 10 % Decrease (Improvement) in urine pH.

R (Urine) Range: (Pre) = 57-191 (Post) = 43 - 128

--

X (Pre) = 112.0 X (Post) = 77.32 X (Difference) = -34.68

This is a 31% Decrease (Improvement) in urine R.

CONTROL GROUP

N=25 (M=6 F=19) X Age = 57 Years, 4 Months

pH (urine) Range: (Pre) = 6.02 - 7.77 (Post) = 6.11 - 7.88

--

X (Pre) = 6.86 X (Post) = 7.02 X (Difference) = + 0.16

This is an Increase (Decline) in urine pH

R (Urine) Range: (Pre) = 69-298 (Post) = 56-255

--

X(Pre) = 156.16 X (Post) = 137.36 X (Difference) = - 18.80

This is a 12% Decrease (Improvement) in urine R

DISCUSSION: Fifty patients under the care of Michael Galitzer, M.D. in Santa Monica, California were randomly selected from a list of 84 patients, regardless of medical problem being treated. All 50 consented to participate. Twenty-five subjects were then randomly selected from the sample as the Experimental Group, and the remaining 25 composed the Control Group. The only difference between the two groups was that the Experimental Group was given the experimental treatment (naturally magnetized water) and the Control Group was not.

All 50 subjects were tested on the Biological Terrain Assessment instrument. A description of this instrument is presented previously in this paper. Previous to BTA testing, all 50 subjects were instructed to undergo a 12- hour fast after the previous night's dinner and collect a first urine sample in the morning. We were most interested in comparing urine pH and urine Resistivity values during pre testing with post study testing values.

Analysis of data indicates significant improvement in the Experimental Group, as measured by a significant decrease in their urine pH and urine Resistivity. The Experimental Group was able to acidify the urine and greatly increase their excretion of toxic mineral salts.

The Control Group was unable to acidify their urine, and had a minimal improvement in urine Resistivity. Their post study urine R values were still quite abnormal, indicating a very dilute urine with reduced concentrations of mineral salts. (Figure 2 & 3)

CONCLUSION

The BTA measures the ability of kidneys to remove wastes from blood cells. As the cells and tissues in the body become more acidic, the blood and saliva become more alkaline. The causes of cellular acidity directly contributes to poor health and aging.

Based on the significant improvement in tests of urine pH and urine resistivity, as measured with the Biological Terrain Assessment instrument, a daily regimen of 16 ounces of naturally magnetized water was shown to be significant in lowering urine pH, and promoting excretion of acids and toxic mineral salts,

suggesting an increased ability of the kidneys to remove toxic wastes from the body. This can be important in long term health maintenance and healthier aging.

The Primary Investigator has conducted several studies on naturally magnetized water with different medical problems. Results have consistently shown significance in reduction of symptoms and improvement in lab test values. More studies are being conducted at several study sites to collect and report more data, in order to establish more conclusive evidence on the efficacy of this naturally magnetized water on physiologic functions.

N=25: 10% Improvement N=25: 2% Decline

Figure 3 RESULTS OF BIO TERRAIN ASSESSMENT (BTA)

N=25: 31% Improvement N=25: 12% Improvement

He began a regimen of the naturally magnetized water in June of 1999. His September tests showed that his blood urea, creatine and white blood count were improving. His tests continued to improve, that on his November visit, he was told that dialysis could be postponed.

References

1. Batmanghelidj, F., 1997. *Your Body's Many Cries for Water*. Falls Church, VA: Global Health Solutions, Inc.
2. Niwa, Y., Hanssen, M., 1989. *Protection for Life: How to Boost Your Body's Defences Against Free Radicals and the Aging Effects of Pollution and Modern Lifestyles*. Wellington, Eng.: Thorsons Publishers, Ltd.
3. Shamberger, R.J., 1981. *Selenium in the Environment*. Science of the Total Environment, 17:59-74.
4. Rossman, I., 1990. Physician as a Geriatrician, in Cape, R.D.T., Coe, R.M., Rossman, I. (ed), *Fundamentals of Geriatric Medicine*, pp. 17-23. New York: Raven Press.
5. Yee, B., Williams, B., O'Hara, N., 1990. Medication Management and Appropriate Substance Use for Elderly Persons, in Lewis, C.B. (ed), *Aging: The Health Care Challenge, 2nd Ed*. Philadelphia: F.A. Davis
6. Schmidt, M.A., Smith, L.H., Sehnert, K.W., 1994. *Beyond Antibiotics*. Berkeley, CA: North Atlantic Books.
7. Hayflick, L., 1988. Theories of Aging, in Williams, T.F. (ed), *Fundamentals of Geriatric Medicine*, pp. 43-50. New York: Raven Press.
8. Collins, J.C., 1991. *The Matrix of Life*. East Greenbush, NY: Molecular Presentations.
9. *Alternative Medicine: The Definitive Guide*, Compiled by The Burton Goldberg Group, 1993. Puyallup, WA: Future Medicine Publishing, Inc.
10. Kronenberg, K., 1985. *Experimental Evidence for Effects of Magnetic Fields on Moving Water*. IEEE Transactions on Magnetics 21(5).
11. Cope, F.W., 1980. *Magnetic Currents in Flowing Water: Implications for Magnetic Water and For the Immune Processes*. Journal of Physiology, Chemistry and Physics, 12: 21-29.
12. Smith, C.W., 1994. Electromagnetic and Magnetic Vector Potential: Bio-Information and Water, in *Ultra High Dilution: Physics and Physiology*, Endler, P.C., Schulte, J, eds., Dordrecht, Austria:Kluwer Academic Publishers, pp. 187-200.
13. Smith, C.W., 1982. *Electromagnetic Effects in Humans, in Biological Coherence and Response to External Stimuli*, Frohlich, H., ed. Berlin: Springer-Verlag, pp. 205-232.
14. Gerber, R., 1988. *Vibrational Medicine*. Santa Fe: Bear & Company