Investigation of Temperature, pH, and Electrical Conductivity of Normal Saline under T-Consciousness Field 2 Treatment

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Abstract

One of the well-known and globally recognized medicinal solutions involving water, with valuable biological properties, readily available in pharmaceutical standards, and the most abundant form of water on Earth, is normal saline. In this research, the influence of T-Consciousness Field 2 (TCF2)—as the applied field with specific purposes such as reducing electrical conductivity—on the properties of normal saline was examined before the application of TCF2 (time zero) and at 4, 8, 24, and 48 hours afterward. According to the results of this study, the control and the samples exposed to TCF followed a similar temperature trend.. The pH of the treated sample showed an insignificant decrease after 48 hours. Furthermore, the electrical conductivity of the sample exhibited a decreasing trend with a 33% change in slope compared to the control, although this difference was not statistically significant. Dissolved oxygen levels under the influence of TCF did not differ significantly from the control; however, the rate of change was approximately 41% higher in the control group. The chloride ion content at 8, 24, and 48 hours was significantly reduced compared to the control ($p < 0.05$). Overall, this study provides evidence for the effect of TCF on the physicochemical properties of normal saline. Further studies are needed to elucidate the mechanism underlying this non-physical field...

Keywords: *Normal Saline, Pure Water, Physical Properties, Taheri Consciousness Field*

Introduction

Continuing from previous studies on the effects of T-Consciousness Fields on pure water, in this research, we turned our attention to a well-known, standardized, and globally accessible solution with a significant biological value called "normal saline" and studied the physical properties of the aqueous solution. Fluid therapy is an essential component of the clinical management of patients, which is administered in colloidal and crystalloid forms [1]. The most commonly used colloid worldwide is normal saline, which is used in the management and treatment of conditions such as hypovolemia (e.g., shock), metabolic alkalosis, fluid loss, and mild sodium depletion [2]. A 0.9% concentration of isotonic sodium chloride is the preferred choice for intravenous replacement of body electrolytes. According to the United States Pharmacopeia (USP) standard, in every 100 milliliters of a 0.9% sodium chloride solution, there are 15.4 milliequivalents of sodium ions and 15.4 milliequivalents of chloride ions. Furthermore, its osmolarity is 308 mOsmol/liter, and its pH range is between 4.5 to 7 [3].

According to Taheri, there are various T-Consciousness Fields (TCFs) with different functions that are subcategories of the Cosmic Consciousness Network (CCN). The influence of these fields is initiated through the mind of the announcer, referred to as the Faradarmangar [4]. Previous studies have explored the properties of pure water in the vicinity of T-Consciousness Fields (TCFs) [5]. The current research aimed to investigate the influence of TCF2, a type of TCFs, on water in the presence of other solutes and assess the extent and direction of changes compared to pure water.

Method

The TCF treatment was applied according to the protocol established by the Cosmointel Research Center[1]. Further details are presented in the general considerations section of this issue. In all experiments, the laboratory temperature was set at 22.7±0.5 degrees Celsius, and humidity was maintained at 21%. Furthermore, all measurements avoided any agitation (shaking) of the sample and control before testing, and sampling was done from the intermediate layers of the containers. In this study, we have three controls and three samples (under the influence of T-Consciousness Field 2). The values related to the mentioned properties were recorded during five measurements at the following time intervals within 48 hours, under constant and identical conditions: *Time Zero:* Before starting treatment. *Time One:* 4 hours after treatment. *Time Two:* 8 hours after treatment. *Time Three:* 24 hours after treatment. *Time Four:* 48 hours after treatment.

The pH and temperature of normal saline (0.9%) were measured according to the Standard Methods for the Examination of Water and Wastewater, No. 4500-H^+ B. The electrical conductivity was measured based on Standard Methods for the Examination of Water and Wastewater, No. 2510 B. Moreover, the evaluation of oxygen content and chloride ion was performed according to Standard Methods for the Examination of Water and Wastewater, Nos. 4500-OG and 4500-Cl-B, respectively.

Results and Discussion

The changes in the physical properties of normal saline (impure water) are shown in Figures 1 and 2.

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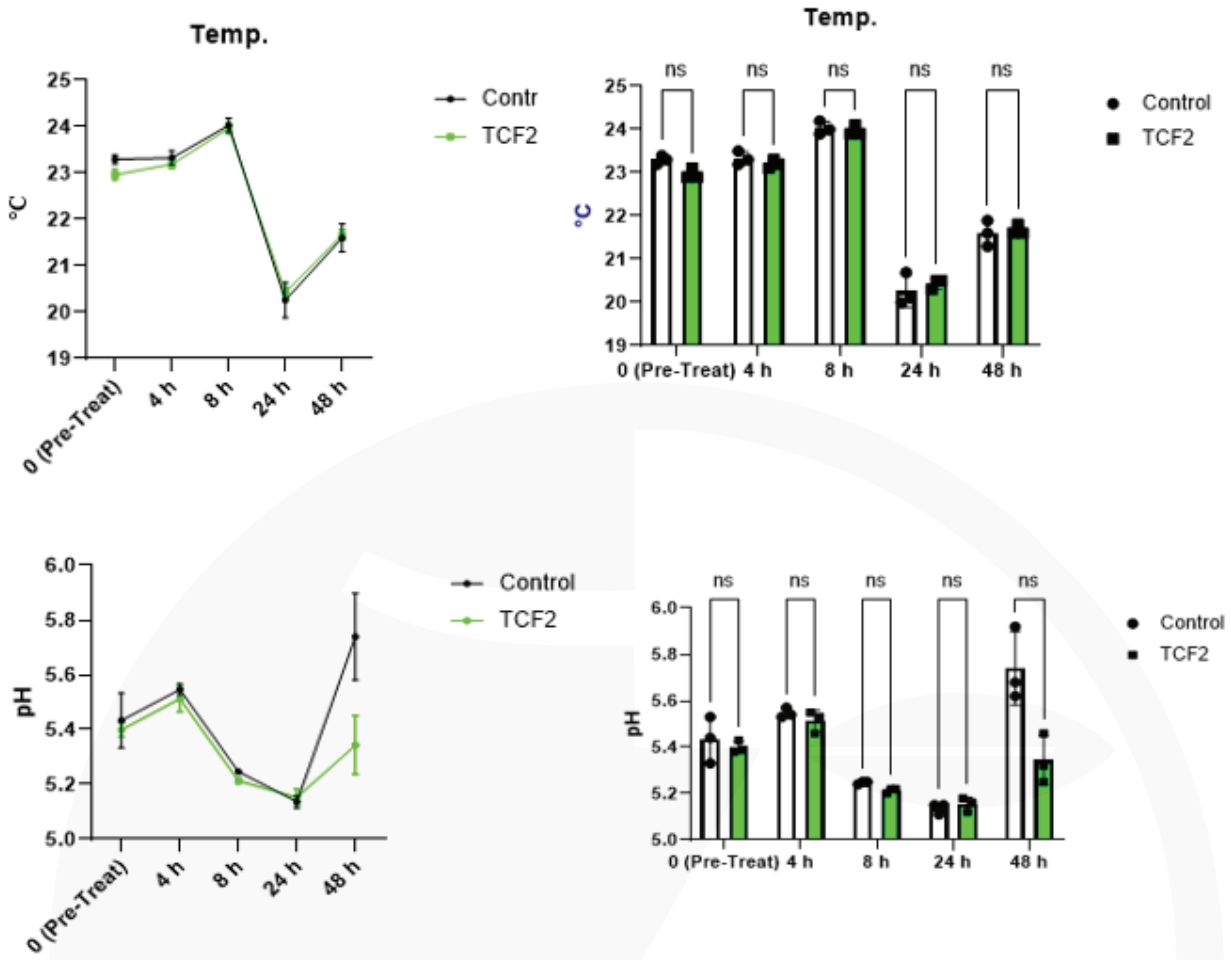


Figure 1. Changes in pH and temperature in the sample and control normal saline at different times in this study.

The temperature changes in the impure water control and sample followed a pattern similar to that of the control and sample of pure water, as presented in a previous study in this issue.. On the other hand, the trend of pH changes in the impure water sample and control is different and fluctuates. The pH increases until 4 hours, then decreases at 24 hours, and increases again at 48 hours. However, the enhancement of pH in the control was not statistically significant compared to the TCF2-treated samp

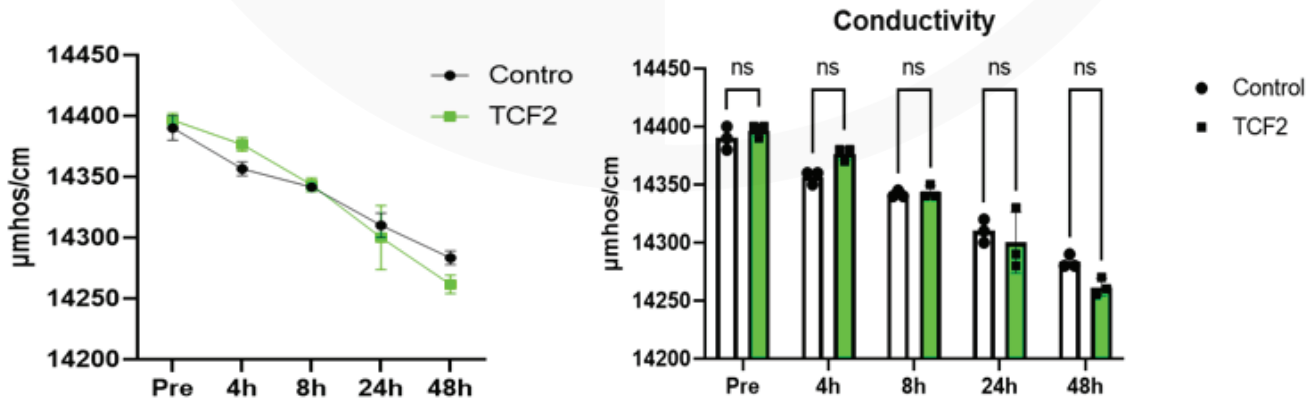


Figure 2. Changes in electrical conductivity of the control and sample of normal saline in this study. Ns: Not significant.

As seen in Figure 2, electrical conductivity showed a decreasing trend in both the control and treated sample but with a steeper slope in the sample, consistent with the purpose of the TCF2. The increase in pH, as shown in Figure 1 in the control and sample, can be attributed to a potential decrease in the amount of dissolved carbon dioxide in the water, which is in line with the overall trend of decreasing electrical conductivity in the control and sample. Considering the increase in entropy due to the dissolution of the solute in pure water, the reduction in ion concentration and electrical conductivity in the sample compared to the control is indicative of the decrease in entropy in the impure water sample under the influence of T-Consciousness Field2. The observed changes in the sample, compared to the control, will not be possible without providing the necessary energy in the study system, indicating its supply through TCF. Further details of the changes in the physicochemical properties of samples under the influence of TCF2, compared to the control, are presented in Table 1.

Table 1. Changes in temperature, pH, electrical conductivity and dissolved oxygen in control and T-Consciousness Field 2 (TCF2)-treated samples at different time points, with standard deviations (SD).

Temp./°C	1	2	3	Control (Mean)	SD	4	5	6	TCF2 (Mean)	SD
Pre	23.4	23.3	23.2	23.30	0.10	23.1	22.9	22.9	22.97	0.12
4h	23.5	23.3	23.2	23.33	0.15	23.1	23.2	23.3	23.20	0.10
8h	24.2	24	23.9	24.03	0.15	23.9	23.9	24.1	23.97	0.12
24h	20.7	20.1	20	20.27	0.38	20.3	20.5	20.5	20.43	0.12
48h	21.9	21.3	21.6	21.60	0.30	21.6	21.6	21.8	21.67	0.12
pH	1	2	3	Control (Mean)	SD	4	5	6	TCF2 (Mean)	SD
Pre	5.33	5.53	5.44	5.43	0.10	5.43	5.39	5.38	5.40	0.03
4h	5.53	5.57	5.54	5.55	0.02	5.46	5.53	5.55	5.51	0.05
8h	5.24	5.25	5.25	5.25	0.01	5.22	5.22	5.2	5.21	0.01
24h	5.11	5.15	5.15	5.14	0.02	5.16	5.18	5.12	5.15	0.03
48h	5.62	5.92	5.68	5.74	0.16	5.46	5.32	5.25	5.34	0.11
Conductivity/ $\mu mhoscm^{-1}$	1	2	3	Control (Mean)	SD	4	5	6	TCF2 (Mean)	SD
Pre	14380	14390	14400	14390	10	14400	14390	14400	14396.67	6
4h	14360	14360	14350	14356.67	6	14380	14370	14380	14376.67	6
8h	14345	14340	14340	14341.67	3	14340	14340	14350	14343.33	6
24h	14310	14300	14320	14310	10	14330	14280	14290	14300	26
48h	14280	14280	14290	14283.33	6	14255	14260	14270	14261.67	8
DO/ $mgLit^{-1}$	1	2	3	Control (Mean)	SD	4	5	6	TCF2 (Mean)	SD
Pre	7.2	7.21	7.17	7.19	0.02	7.23	7.19	7.18	7.20	0.03
4h	7.2	7.25	7.2	7.22	0.03	7.24	7.24	7.22	7.23	0.01
8h	7.25	7.26	7.24	7.25	0.01	7.28	7.26	7.24	7.26	0.02
24h	7.3	7.33	7.32	7.32	0.02	7.3	7.3	7.26	7.29	0.02
48h	7.35	7.36	7.34	7.35	0.01	7.32	7.33	7.31	7.32	0.01
Cl-	1	2	3	Control(Mean)	SD	4	5	6	TCF2 (Mean)	SD
Pre	5261	5261	5261	5261	0	5261	5261	5261	5261	0
4h	5192	5192	5192	5192	0	5182	5192	5192	5189	6
8h	5192	5192	5192	5192	0	5140	5120	5080	5113	31
24h	5157	5157	5150	5155	4	5121	5100	5080	5100	21
48h	5180	5180	5192	5184	7	5080	5100	5080	5087	12

As illustrated in Figure 3, while the chloride ion concentration fluctuated in the control, a generally decreasing trend was observed in the treated sample, consistent with the purpose of TCF2. It should be noted that in the case of T-Consciousness Field 2, it is possible to define a specific purpose, such as reducing the electrical conductivity of the sample. Moreover, the difference between the values of the chloride ion in the control and treated samples was significant after 8 hours. (p-value< 0.05). On the other hand, the electrical conductivity of both the control and treated samples decreased over time. However, the rate of change in the treated sample was about 33% higher, consistent with the purpose of TCF2 and the greater reduction in chloride ion observed in the treated samples.

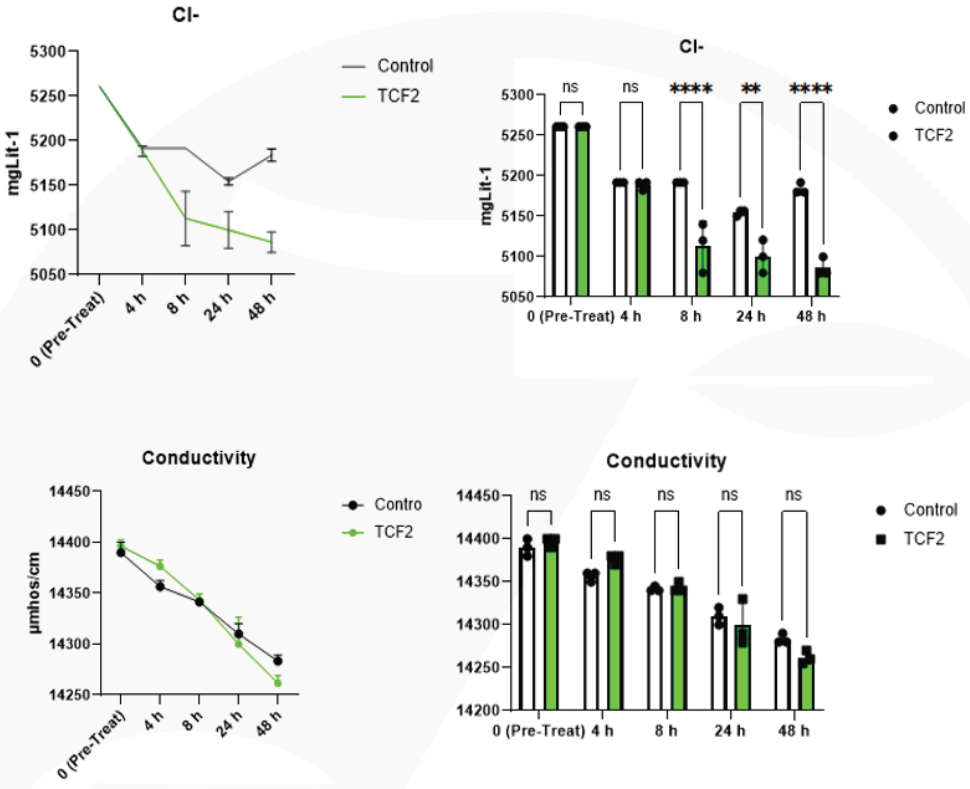


Figure 3. Changes in chloride concentration and electrical conductivity in control and T-Consciousness Field 2 (TCF2)-treated samples of impure water. **: p-value< 0.01; ****: p-value< 0.0001. ns: not significant.

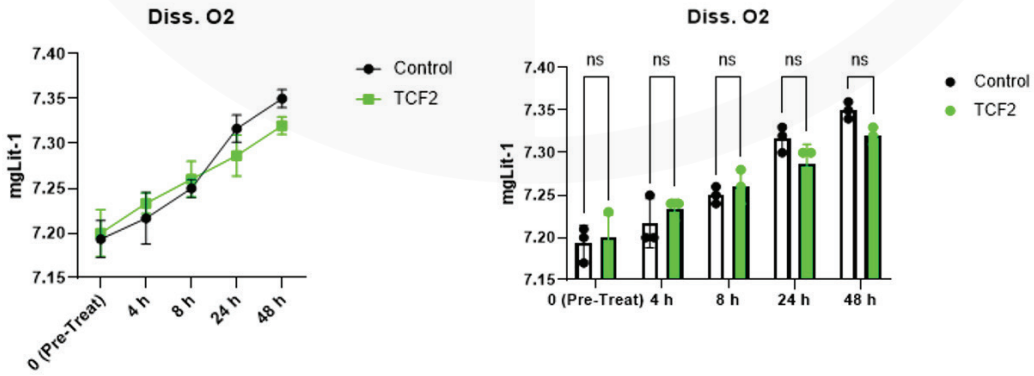


Figure 4. Changes in dissolved oxygen levels in control and T-Consciousness Field 2 (TCF2)-treated samples and control over different time points of this study. Ns: not significant

As illustrated in Figure 4, the value of dissolved oxygen in control and treated samples of impure water exhibited a steady increasing trend over the time period of this study, with no significant difference between control and TCF2-treated samples. This trend is opposite to that observed for pure water, presented in a prior study of the current issue. Nevertheless, the slope of changes in dissolved oxygen in the control was about 41% higher than that of the treated samples.

Numerous studies have investigated the effects of physical interventions, such as electromagnetic fields, on the physicochemical properties of water, including pH, electrical conductivity, etc. [6, 7]. In this study, the effect of a field with a non-physical nature has been investigated. The influence of this T-Consciousness Field is initiated through the human mind, and there is no form of physical intervention during the experimental procedures. It is hypothesized that information transmitted from TCFs may induce alterations in the samples. It should be noted that, from this perspective, in addition to the physical part of particles and materials—likened to hardware—there is also a non-physical component, referred to as the "mind" in Taheri's theory [8]. This study provides evidence for the transmission of information under the influence of TCF2. Further experiments are needed to elucidate the mechanism of TCFs.

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