

The Role of Succussion in Homeopathy

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Abstract

Succussion is a procedure that was first presented by Hahnemann. It is based on two interrelated processes: intense milling and sequential dilution. During the milling the molecules from the remedy nanoparticle surface are continuously detached and stabilized by lactose molecules, while the radius of the remedy nanoparticles decreases. Due to the continuous formation of new, stabilized remedy molecules during the milling they are in part preserved during successive dilution up to high potencies and so exclude the placebo effect, while the remedy nanoparticles gradually disappear due to sequential dilution and their permanent size reduction. In this way, the remedy-nanoparticle suspension is transformed by succussion into a homeopathic solution of stabilized remedy molecules with a large fraction of stabilized simillimum molecules.

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Introduction

Homeopathy works on the principle of treating “like with like.” This principle, known as the Law of Similars, is attributed to the ancient Greek physician Hippocrates, who observed that substances that cause symptoms similar to those of a disease in healthy individuals can be used to treat the same symptoms in sick individuals. This method of healing, based on the Law of Similars, has been a part of human history since very early times and has been part of our development and continues in a form to this day.

Homeopathy as a special system of medicine was developed by Samuel Hahnemann (1755 - 1843) in the late 18th century when he experimented with various substances and developed the principles and practices that define homeopathy today. Hahnemann's ideas were influenced by the medical theories and practices of ancient Greek medicine, but the systematic development of homeopathy as a distinct medical system is primarily attributed to him and his well-known work “The Organon of the Healing” [1]. Homeopathy was also discussed in books by Clarke [2], Vithoulkas [3] and Bellavite and Signorini [4]. Many presentations of clinical research have been published, showing that homeopathy goes beyond a simple placebo effect [5, 6], and despite the alleged scientific disagreements [7, 8] is successful and widespread [9]. There have been many published explanations of Homeopathy. Some of them have greatly increased the complexity of these explanations [10-12].

The all-inclusive aspect of homeopathy [13-15] highlighted one of its most significant properties, i.e., that the disease-causing compound in a healthy person, i.e., Simillimum, must have the same chemical composition as the compound causing the sickness in ill people.

It should be emphasized that Vithoulkas first presented the idea of two compounds with the same resonance spectrum (i.e., chemical

composition) in the remedy and the patient: “If a substance is able to create a similar picture in a healthy organism, the probability that the level of its vibration will be very close to the resultant frequency of the diseased organism is good. Therefore, there can be a strong strengthening of the defense mechanism, according to the principle of resonance” [3], while Bellavite and Signorini defined the name of this compound as simillimum “if the match is substantial or perfect the remedy is a ‘simillimum’ or ‘most similar medicine,’ the administration of only a minimum dose of remedy triggers a reaction in the patient that leads, often after an initial aggravation of the disease, to healing” [4], and they highlighted the most important compound in Homeopathy, i.e., the simillimum.

Nowadays, we consider homeopathy to be a natural phenomenon related to the biochemical equilibrium of the disease in question, where the immune defense response stops the progression of the disease and restores the biochemical equilibrium, so that the organism does not quickly collapse due to the disease. The existence of an equilibrium enables the operation of the basic thermodynamic principles and laws. Thus, today the scientific justification of homeopathy is conditioned by Le Chatelier's principle and the Law of Mass Action [13, 14].

One of the important activities in homeopathy is the synthesis of homeopathic medicines, which is based on a special process that involves intense milling and successive dilutions known as succussion. This process was invented by Hahnemann and is a special method of synthesis and raises a few questions regarding its effectiveness and its healing mechanism. This paper deals with the concept of the preparation and optimization of a homeopathic medicine by succussion and examines its connection with the placebo effect. The placebo effect is an interesting phenomenon where an individual experiences an obvious improvement in their symptoms or illness after receiving a treatment that has no therapeutic effect.



Succussion and Placebo Effect

The beginning of Hahnemann's examination of Homeopathy relates to his finding that by reducing the initial dose of the remedy in the patient, the initial Homeopathic aggravation decreases. Homeopathic aggravation is a phenomenon associated with the symptoms of the patient's disease, which initially intensifies with the addition of the remedy and then gradually disappears, which leads to the patient's recovery. The fact that the reduction of the initial dose of the remedy relaxes or even eliminates homeopathic aggravation was Hahnemann's first practical achievement in the treatment of Homeopathy. Today, we attribute this phenomenon to the Law of Mass Action during the establishment of a new biochemical equilibrium after receiving the homeopathic simillimum molecules obtained from the remedy [13].

The remedy is a substance of unknown chemical composition with an inorganic or organic source that triggers the symptoms of the same disease in healthy people. In this substance, molecules are related to each other by physical bonds and have different chemical compositions.

Continuing his efforts, Hahnemann extended his research to optimize the efficiency of the remedy using succussion, i.e., intense milling combined with the sequential dilution. In this way he observed an improvement in the effectiveness of the homeopathic medicine he prepared from the remedy. This procedure has been continued by his successors and is in principle the main process for preparing the medicine in homeopathy today.

Intense milling of the remedy contributes to the formation of remedy nanoparticles, which have several benefits over crude doses of the same substance, i.e., chemical and biological reactivity, including enhanced bioavailability, adsorptive capacity, intracellular ease of access, increased capability to cross cell membranes and even the blood-brain barrier and a considerably better protection profile due to a reduced toxicity.

However, the most important feature of intense milling is the continuous acquisition of new molecules breaking off the nanoparticle surface at the expense of the decreasing size of the remedy nanoparticles.

The preparation process includes very strong milling with lactose and serial dilution in an ethanol-water solution, usually in glass containers. In this process, even completely insoluble materials are changed into liquid preparations when they are dissolved in a mixture of alcohol and water and can then be easily used as a homeopathic medical solution. The purpose of this process is to break the physical bonds of the molecular aggregates and to chemically activate them. These molecules will not be able to re-associate at high dilutions but will physically associate with the sugar-lactose molecules, which are in large excess. The sugar molecules will be digested in the human body and the chemically activated remedy molecules in homeopathic medicine will remain suitable for targeted biochemical reactions in the healing process.

Molecules on the surface of the remedy nanoparticles are less well bound, because of the smaller number of neighboring atoms on the curved surface and so the molecules split off during milling. When the size of the nanoparticles decreases, the overall surface area of the nanoparticles in the suspension increases. Moreover, due to the decrease in the radius of the nanoparticle and the increase in the curvature, the separation of molecules during milling is facilitated, and the number of separated molecules per number of nanoparticles present in the suspension increases during each succussion cycle. The separated molecules from remedy nanoparticles with a large fraction of simillimum molecules that are stabilized during milling with lactose molecules and form a homeopathic medicinal solution.

It should be noted that with each cycle of succussion, the impurities formed during grinding are washed away and new lactose molecules are introduced to stabilize the newly molecules breaking off the nanoparticle surface.

The concentration of the stabilized simillimum molecules, due to their continuous formation during milling, partially withstands the successive dilution, up to the complete elimination of the remedy nanoparticles from the suspension. Succussion is therefore a process where, through a combination of milling and sequential dilution, the suspension of remedy nanoparticles is transformed into a medical solution of remedy molecules that are physically bound (i.e., stabilized) to lactose molecules, which participate in the formation of a new equilibrium during treatment with homeopathy.

After the succussion of remedy nanoparticles, the suspension gradually changes to a homeopathic solution with simillimum molecules that are predominantly stabilized. These are biochemically more active than the suspension of nanoparticles, but the molecules of simillimum are difficult to identify in the solution, but they do cure. Something that is clinically confirmed. After the remedy nanoparticles are eliminated during succussion by sequential dilution, it is believed that the medical solution is empty, so the medical effect of the homeopathic treatment is described as a placebo effect. In addition, it is supposed that the medical solution possesses "life energy," which is supposed to be introduced into the solution by an energy input during milling, and which is supposed to exhibit a healing potential. These "unnoticeable," but medically active simillimum molecules contribute to the creation of the patient's well-being, as is clinically confirmed, and thus cooperate during the formation of a new equilibrium.

So, we are faced with a process where succussion gradually changes the suspension of the remedy nanoparticles into a solution of stabilized remedy molecules with an appropriate proportion of simillimum molecules. The homeopathic solution increases the healing effectiveness with the stages of succussion, since the ratio between the less-effective remedy nanoparticles, which gradually disappear during succussion, and the stabilized molecules of the remedy (i.e., simillimum), which are formed during succussion, increase in favor of the active molecules of simillimum.

The main argument for the ever-repeated statements that succussion significantly increases the effectiveness of the treatment of homeopathic medicine and that the homeopathic medicine could not contain simillimum molecules due to sequential dilution and earns the label placebo effect is not accurate.

The main disagreement with this designation of official medicine lies in the fact that the medical solution after succussion is not empty but contains simillimum molecules that are continuously produced during the succussion and persist or partially compensate for the sequential dilution during the succussion cycles.

The number of simillimum molecules that break off during succussion can to some extent compensate for the decrease in the concentration of simillimum molecules during sequential dilution and maintain the concentration of simillimum molecules even though the remedy nanoparticles are consumed during succussion. This can happen when extreme dilutions are exceeded by serial dilution, but the homeopathic solution still contains simillimum molecules. In this case, their therapeutic effect cannot be considered a placebo effect. Therefore, the medical profession cannot officially associate their medicinal effectiveness with a placebo effect, due to the possibility that homeopathic medicines contain simillimum molecules.

This is where a misunderstanding can occur in the interpretation of



homeopathic treatment. Determining the concentration of simillimum in a homeopathic medicine based on sequential dilution is not accurate, since extremely high dilutions of a suspension of remedy nanoparticles, where the remedy nanoparticles are no longer in suspension, can still contain simillimum molecules, and classifying the medicinal effect in this case as a placebo effect is a wrong assumption. So, the only way to confirm the placebo effect is a chemical analysis of homeopathic medicine.

Conclusion

Succussion is a unique process for the preparation of a homeopathic medicine from remedy nanoparticles and is crucial to an effective homeopathic treatment. It consists of two connected processes, i.e., intense milling and sequential dilution, that run in parallel and gradually change the suspension of the remedy's nanoparticles into a homeopathic solution of predominantly stabilized simillimum molecules, which are partially maintained in the homeopathic medicine after serial dilution and do not support the placebo effect. The homeopathic medicine is associated with a large input of milling energy, which separates the drug molecules from the surface of the nanoparticles and is the carrier of the medical potential for establishing a new equilibrium and thus healing the subjects.

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Conflict of Interest

None.

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