Activity of homoeopathic drug sulphur with different potencies on lawn culture of escherichia coli and candida albicans – topically an in-vitro evaluation

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Abstract

Background: Here in this study we evaluated the role of Sulphur 30,200. And 1M in a urine culture. For almost decades of years’ homeopaths have attempted to demonstrate the existence of miraculous power of minute doses, the general implication of all this work is that to demonstrate the action of Sulphur on a Candida and E. coli with the evidence of changes that takes place in them in-vitro, the present study aims to evaluate the effect of medicine Sulphur in various potencies on fungus and bacteria.

Methods: The bacteria are isolated from the sample of patients, which came for the drug sensitivity test of antibiotics instead of antibiotics three solutions were given to test its antibacterial and antifungal activity and the bacteria and fungi are cultured by following methods such as agar dilution method, agar diffusion method and were tested directly by lawn culture method.

Results: When these solutions were tested directly using lawn culture method it was found that all three solutions had antibacterial and antifungal activity producing zone of inhibition.

Conclusion: All the given potencies of Sulphur 30,200 And 1M have antibacterial and antifungal activity against the tested isolates topically very similar to any antibiotics and with zero side effects.

Keywords: In vitro, E. coli, candida, Sulphur, urine culture, lawn method, topically

Introduction

In present modern era the homoeopathy system of medicine proves its utility in all type of illness. Man’s destiny consists in reuniting himself again with the divine life through the universal expansion of all the faculties of his soul and the realization of all the celestial harmonies the germs of which god had deposited in his nature and towards the construction of which science and art will furnish him the means [1]. The present study shows the “In vitro antibacterial and antifungal activity of homoeopathy antipsoric drug Sulphur, the present study shows the activity of drug against a particular class of bacteria and fungus in form of 30 C, 200 C and 1M dilution.

Selection of Medicine: In the selection of medicine, the main symptoms of bacterial illness which are written in the leading modern edition books of practice of medicine, and then the king of antipsoric medicines in homoeopathy i.e Sulphur as mentioned by Dr Samuel Hahnemann in his book theory of chronic diseases [2] stating that psora is the cause of all the illness hence have selected Sulphur as the higher graded drug were used for the experimental trial. The selected drugs are used in the standard form on the particular class of bacteria and fungi separated from patient’s sample.

Methods and Materials

Source of bacteria: The bacteria are isolated and taken from the sample of patient with urinary tract infection, and same was confirmed and taken from the patient who has not taken any system of medicine for the presenting illness, the sample was collected on 1-9-18 from Father Muller Homoeopathic Medical College and Hospital. The sample was sent for the drug susceptibility test of allopathic medicines (antibiotic) as per patients request further the same sample with the consent of the patients was used for the lawn culture method of homoeopathic medicines.

Culture of bacteria: The bacteria are cultured by streak culture / surface plate method on solid media.
Identification of bacteria: Bacteria are identified by colony characteristics, staining and by the biochemical tests by MD Microbiologist.

Examining the action of homoeopathic drug on bacteria using appropriate media, method and material, which are recognized in modern medicine using modern techniques.

The evaluation of the results by the reaction of drug on bacteria is done by the MD Microbiologist who is unaware of homoeopathic system of medicine and also the drug given to him for analysis.


Test Material
i. Glassware – Petri dishes, Culture tubes, Slides, Cover slips, Glass pipettes, Flask and measuring cylinder [3],

ii. Reagents – Solid and liquid media, staining reagents and different potencies of Sulphur homoeopathic medicines, agar dilution method. Mueller-Hinton agar plates prepare from dehydrated media,

iii. Plastic wares – Tips of micropipettes, Applicators

iv. Others – Inoculation loop and needles, Mueller Hinton agar plates [3], Lawn culture method. Solution 1 is Sulphur 200, solution 2 is Sulphur 30 and solution 3 is Sulphur 1M respectively.

v. Drug: – In this study, drugs from recognized pharmaceutical companies are used which are available in market. Frequently used different potencies of the drugs will be used to assess its in-vitro action.

Observations
Figure 1 showing when the solution were tested by agar dilution method it did not show any change further when tried with agar diffusion method it still did not show any activity.

Results
After testing the three solutions mentioned as solution-1, solution -2 and solution-3 that were sent to laboratory for checking for any antibacterial activity. It was tested against bacterial isolates and fungal isolates. It was found that the three solutions have antibacterial and antifungal activity.
against the tested isolates topically but not in dilution. In the above conducted in-vitro experiment if drug Sulphur 30,200,1M in standard condition shows the activity against the bacteria Sulphur is antibacterial antifungal in nature and if any potency of Sulphur 30,200,1M in standard condition shows no any activity against the bacteria means Sulphur has no nature of antibacterial and antifungal activity and if any drug shows the variable activity against the bacteria proves that Sulphur has the capacity of producing antibacterial and antifungal activities inside the body.

The above-mentioned details show the activity of Sulphur on the bacteria then this bacterium infect any part of the body is cured / controlled by our king of antipsoric Sulphur and its corresponding dilution. This proves that homoeopathy theory single medicine treats whole body. Figure 3: showing the evidence based study report stating the antibacterial and antifungal activity of Homoeopathic medicine Sulphur 30C, 200 C and 1M which was given to a MBBS MD microbiologist as solution 1, 2 and 3.
1. The solutions were tested by agar dilution method. Mueller-Hinton agar plates prepared from dehydrated media obtained from HiMedia laboratories were used. Various dilutions of solutions were taken. All three solutions were tested with 1: 1, 1: 2 and 1: 3 dilutions. By this method it was found that all three solutions were not effective against *Escherichia coli* ATCC 25922 and *Candida albicans* ATCC 90028 since there was no inhibition of growth.

2. The solutions were tested by agar diffusion method. Various dilutions of solutions were taken. All three solutions were tested 1:1, 1:2 and 1:3 dilutions. Wells of 6mm diameter were created in Mueller Hinton agar plates and solutions were added. By this method it was found that all three solutions were not effective against *Escherichia coli* ATCC 25922 and *Candida albicans* ATCC 90028 since there was no inhibition of growth.

3. The solutions were tested directly. Lawn culture of *Escherichia coli* ATCC 25922 and *Candida albicans* ATCC 90028 were done and solutions were directly placed on the surface of the media without filter paper or any other interventions. It was found that all three solutions produced zone of inhibition against *Escherichia coli* ATCC 25922 and *Candida albicans* ATCC 90028.

With this we concluded that the solution-1, 2 and 3 may be having antibacterial and antifungal activity when used topically.

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**ANNEXURE**

Three solutions were received by us marked Solution-1, 2 and 3 with request for testing for any antibacterial and antifungal activity with the available facility in Indiana Laboratory.

**METHOD:**

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Homeopathy has an integralistic approach towards the disease. The derangement of vital force by any noxious miasmatic forces is always the primary cause of the disease, which is followed by the functional and structural changes. Hence pathology is the result of derangement of the vital force by the noxious miasmatic forces and the symptoms are the results of the suffering vital force. In short it’s the functional changes precede the structural changes always thus homoeopathic medical science views the facts of the universe in general and medical facts in particular, form a vitalistic-substantialistic standpoint.

In aphorism 81 Hahnemann says “the fact that this
extremely ancient infecting agent its psora, contribute to the production of these greater varieties of chronic diseases nothing but the secondary manifestation of the psora which has hitherto been treated of in old pathological works under a number of special names as disease of an independent character” [3]. By the above statement it is very clear that pathological symptoms are the expressions of disease and then are the effects of miasmatic causes [3]. Hence various pathological names of various diseases caused by various bacteria and fungi are primarily the results of deranged vital force by the miasmatic forces especially psora [3]. In the above conducted invitro experiment if drug Sulphur 30,200,1M in standard condition shows the activity against the bacteria Sulphur is antibacterial antifungal in nature and if any potency of Sulphur 30,200,1M in standard condition shows no any activity against the bacteria means Sulphur has no nature of antibacterial and antifungal activity and if any drug shows the variable activity against the bacteria proves that Sulphur has the capacity of producing anti-bacterial and antifungal activities inside the body. The above-mentioned details show the activity of Sulphur on the bacteria then this bacterium infect any part of the body is cured / controlled by our king of antipsoric Sulphur and its corresponding dilution. This proves that homoeopathy theory single medicine treats whole body. This study shows us the variation in susceptibility of bacteria towards Sulphur and its corresponding dilution sand the action of Sulphur 30C, 200C and 1M against bacteria and fungus under in vitro conditions when done topically. This study provides supportive evidence to various questions asked about the authenticity of homoeopathic medicines and also to the most sensational question asked does homoeopathic medicines works? Is it a placebo etc. This study provides tools for drugs standardization and the results support the uses of this medicine for the treatments of infections. As per Stuart Close, the totality of symptoms can be considered as the basis of a homoeopathic prescription, represents the therapeutic idea. This is applicable in pathology also. Disease in general, is considered as a whole is composed of totality of all the symptoms which represent it to our senses. The pathological totality, can be personified or pictured by the imagination in the form of a human being [4]. So on the basis of above results we now proceed to the medical homoeopathic treatment of the illimitably large number of chronic diseases, which, after the above gained knowledge of their three fold nature, has not, indeed, become easy, but what without this knowledge was before impossible has at last become possible, since the homoeopathically specific remedies for each one of these three different miasmata have in great part been discovered [1].

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Conflicts of interest
There are no conflicts of interest.