

Impact of Certain Allopathic Medicines on Inhibitory Activity of *Mezereum* 200 against *Candida albicans*: An *In-vitro* study

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Background

In their previous screening experiment Gupta *et al.* demonstrated that out of some homoeopathic medicines (viz. *Acid benzoicum*, *Apis mellifica*, *Graphites*, *Kali iodatum*, *Mezereum*, *Petroleum*, *Sepia*, *Silicea*, *Sulphur*, *Sulphur iodatum*, *Tellurium*, *Thuja occidentalis*) tested in 30 and 200 potencies, *Mezereum* 200 showed maximum inhibition of the growth of *Candida albicans* on comparing the 'Zone of Inhibition' in culture plates treated with homoeopathic medicines keeping standard antifungal Ketoconazole, rectified spirit and distilled water as control by using *Disc method* and published the results in Vol. 9 (2), April-June 2015 of Indian Journal of Research in Homoeopathy(IJRH)¹.

Further, the team conducted another experiment with certain prohibited edible items (viz. *garlic*, *onion*, *cardamom*, *clove*, *caraway*, *ginger*, *fenugreek*, *black pepper*, *asafoetida*, *red chilli*, *green chilli*, *turmeric*, *lemon* and *camphor*) and demonstrated that there is no effect of these items on the efficacy homoeopathic medicine *Mezereum* 200 in inhibiting the growth of *Candida albicans* in *in-vitro* condition. This paper entitled "Impact of forbidden food stuffs on the efficacy of Homoeopathic medicines: An *in-vitro* evaluation" has been submitted to IJRH for publication.

A step ahead in this series, Gupta *et al.* dismissed the belief of contemporary homoeopathic physicians that beverages like *tea*, *coffee* and some other items like *tobacco* and *bhang* neutralize the action of potentised homoeopathic medicines by demonstrating that the above mentioned items have no negative effect on

Mezereum 200 in inhibiting the growth of *Candida albicans* in *in-vitro* condition. This experimental research work entitled "In-vitro evaluation of impact of forbidden items on the efficacy of homoeopathic medicines" was published in Vol. 2 No. 1, Feb.-Apr. 2017 of Advancements in Homoeopathic Research².

Latest in this series, Dr. Gupta and his team also conducted experiment with a few allopathic medicines to assess whether these by any means neutralize / antidote the action of homoeopathic medicines.

Abstract

The use of allopathic medicines simultaneously with homoeopathic treatment had been condemned by Homoeopathic physicians since the inception of Homoeopathy on the basis of their prejudice that homoeopathic medicines would be neutralized/antidoted by allopathic medicines.

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The aim of this *in-vitro* study was to provide experimental proof, to validate or dismiss the belief of contemporary homoeopathic physicians of restricting simultaneous use of allopathic medicines along with homoeopathic medicines.

The result of these experiments have shown that there is no negative impact of these allopathic medicines on the inhibition in growth of human pathogenic fungus *Candida albicans* by Mezereum 200 in *in-vitro* condition.

This experiment is only an effort to elicit the effect of above mentioned items on the inhibition in growth of human pathogenic fungus *Candida albicans* by Mezereum 200 in *in-vitro* condition and has nothing to do with any known or unknown side effects / contraindications of the allopathic medicines.

Keywords

Candida albicans, Allopathic medicine, Prednisolone, Ibuprofen, Paracetamol, Atenolol, Glibenclamide (Daonil), Enalapril maleate (Envas), homoeopathic medicine, *Mezereum 200*, *in-vitro* inhibitory effect, biological experimental model, disc method, zone of inhibition technique.

Introduction

Majority of Homoeopathic physicians even today restrict the intake of Allopathic medicines, religiously following what Dr. Hahnemann, the father of Homoeopathic science advocated in aphorism §242 and §259 of *Organon of medicine*³ without having the insight to what Master said with limited resources and was based on deductive logic in the purview of change in response to treatment observed along with simultaneous use of Allopathic medicines. These results differ from individual to individual.

In aphorism 260 of *Organon of Medicine*³ he emphasized necessity of investigating into these obstacles to cure because certain Allopathic medicines may act as disease aggravating or modifying agent causing errors which are often not noticed by the attending physician.

To unveil the mystery, the team picked up a few common Allopathic medicines to observe their effect on the action of homoeopathic medicines in *in-vitro* conditions in the Medical Mycology lab. of GCCHR to ascertain the efficacy of *Mezereum 200* in the

inhibition of growth of human pathogenic fungus *Candida albicans*.

Objective

To observe the effect of Allopathic medicines Prednisolone, Ibuprofen, Paracetamol, Atenolol, Daonil, Envas on the efficacy of *Mezereum 200* in the inhibition of growth of human pathogenic fungus *Candida albicans* in biological experimental model.

Materials and Methods

1. Isolation of human pathogenic *Candida albicans*:

A part of the sample collected by swab from the patient suffering from oral ulcers was examined directly in Potassium hydroxide (10%) slide mount for the presence of yeast cells. KOH preparation of swab showed fair number of yeast like cells and fungal mycelium. For isolation, rest part of swab was inoculated in petridishes poured with Sabouraud's Dextrose Agar (SDA) with and without Cycloheximide and Chloramphenicol (HI Media B. No. 9039) incubated at 37±1° C for 72 hours. Microscopic examination of 4 days old culture showed globose, short, ovoid sometimes elongated blastoconidia (3 to 6 μm) on corn meal agar. Reynold's Braude phenomenon was observed by incubating blastoconidia in human serum at 37°C and germination was found to be more than 70%.

Fermentation and assimilation test further confirmed the identity of the species as *Candida albicans*. Swab from healthy oral mucosa were kept as Control. However, for contamination, if any, petridishes poured with Sabouraud's Dextrose agar in four replicates were exposed to the environment which gave several mycelial fungi dominated by species of *Aspergillus* but there was no *Candida albicans* in the working environment.

2. Preparation of allopathic medicines:

All the Allopathic medicines in question were dissolved in specific amount of distilled water in such a way that 5 ml solution of the said medicine contained 0.1 mg of the original medicine only. This solution was autoclaved at 15-pound pressure. 5 ml of this autoclaved solution of each item was mixed with 5 ml of *Mezereum 200* so that the total solution was 10ml.

| Sn. | Medicine | Method of preparation |
|-----|--------------------------------------|---|
| 1. | Prednisolone 5 mg | Dissolved in 250 ml of distilled water and autoclaved. 5 ml of this solution had 0.1 mg prednisolone. |
| 2. | Ibuprofen 400 mg | Dissolved in 20000 ml (20 ml) of distilled water so that 5 ml of autoclaved solution had 0.1 mg ibuprofen. |
| 3. | Paracetamol 500 mg | Dissolved in 25000 ml (25 ml) of distilled water so that 5 ml of autoclaved solution had 0.1 mg paracetamol. |
| 4. | Atenolol 25 mg | Dissolved in 1250 ml of distilled water so that 5 ml of autoclaved solution had 0.1 mg atenolol. |
| 5. | Glibenclamide 5 mg(Daonil) | Dissolved in 250 ml of distilled water so that 5 ml of autoclaved solution had 0.1 mg glibenclamide. |
| 6. | Enalapril maleate 5 mg (Envas) | Dissolved in 250 ml of distilled water so that 5 ml of autoclaved solution had 0.1 mg enalapril maleate. |
| 7. | Ketoconazole 200 mg | Dissolved in 10000 ml (10 ml) of distilled water so that 5 ml of autoclaved solution had 0.1 mg ketoconazole. |

3. Methodology:

Disc method was used to assess the effect of above mentioned allopathic medicines on the efficacy of homeopathic medicine *Mezereum 200* in *in-vitro* conditions against human pathogenic *Candida albicans* by using "Inhibition Zone Technique".^{4,5}

20 ml sterilized SDA was plated on sterilized petridishes and allowed to solidify. 1 ml of SDA medium was seeded with the culture broth, mixed well and poured over the surface of all the petridishes already plated with medium. The discs (12 mm in diameter) of sterilized Whatman No. 1 filter paper dipped in mixture of *Mezereum 200* (5ml) and 5ml solution of above mentioned allopathic medicines each were placed on the centre of each petridish separately. Disc soaked in Ketoconazole (5ml), *Mezereum 200* (5ml) and Rectified spirit (5ml) were kept as control.

Petridishes were then incubated at 37+1°C for 72 hours. The impact of prohibited item on the efficacy of homeopathic medicine *Mezereum 200* was judged by comparing the zone of inhibition to the growth of *Candida albicans* produced by *Mezereum 200* alone to the zone of inhibition produced by *Mezereum 200* admixed with these allopathic medicines. An appreciable reduction in the zone of inhibition by *Mezereum 200* admixed with these allopathic medicines as compared with that of *Mezereum 200* alone was considered as negative impact. Similarly, same zone of inhibition was considered as no impact while increase in the same was considered as positive impact on the inhibition in growth of human pathogenic fungus *Candida albicans* by *Mezereum 200* in *in-vitro* condition.

The experiment was repeated three times and the mean effective area of zone of inhibition was calculated.

Result

The results of these experiments have shown that there is no effect of allopathic medicines Prednisolone, Ibuprofen, Paracetamol, Atenolol, Daonil, Envas on the effect of *Mezereum 200*, a homeopathic remedy, in causing inhibition of growth of pathogenic fungus *Candida albicans* in biological experimental model in *in-vitro* condition.

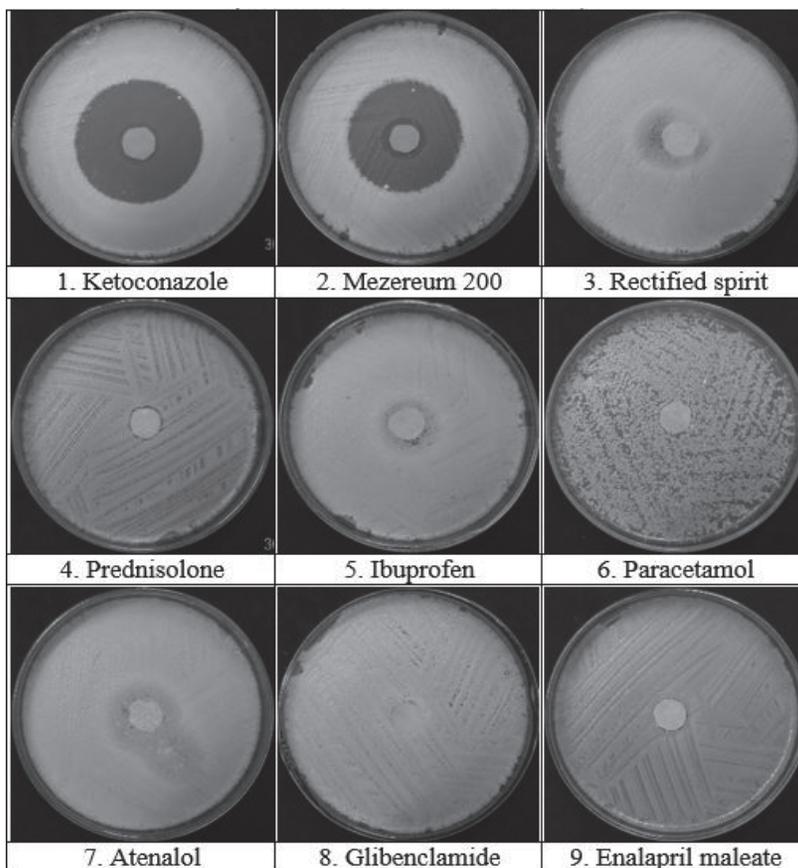
TABLE-1

Impact of Allopathic medicines alone on the growth of *Candida albicans* in comparison to *Mezereum 200* assessed by "Inhibition Zone Technique"
(Diameter of disc = 12 mm)

| Sn | Photo No. | Control | Allopathic medicine | Zone of Inhibition against <i>Candida albicans</i> (in mm diameter) |
|----|-----------|---------------------|---------------------|---|
| 1. | 7103 | Ketoconazole | - | 40.00 mm |
| 2. | 7102 | <i>Mezereum 200</i> | - | 37.00 mm |
| 3. | 7101 | Rectified spirit | - | 12.00 mm |
| 4. | 7104 | - | Prednisolone | 12.00 mm |
| 5. | 7105 | - | Ibuprofen | 12.00 mm |
| 6. | 7106 | - | Paracetamol | 12.50 mm |
| 7. | 7107 | - | Atenolol | 13.00 mm |
| 8. | 7108 | - | Glibenclamide | 12.00 mm |
| 9. | 7109 | - | Enalapril maleate | 12.00 mm |

PLATE-1

Impact of Allopathic medicines alone on the growth of *Candida albicans* in comparison to Mezereum 200 assessed by "Inhibition Zone Technique" (Diameter of disc = 12 mm)

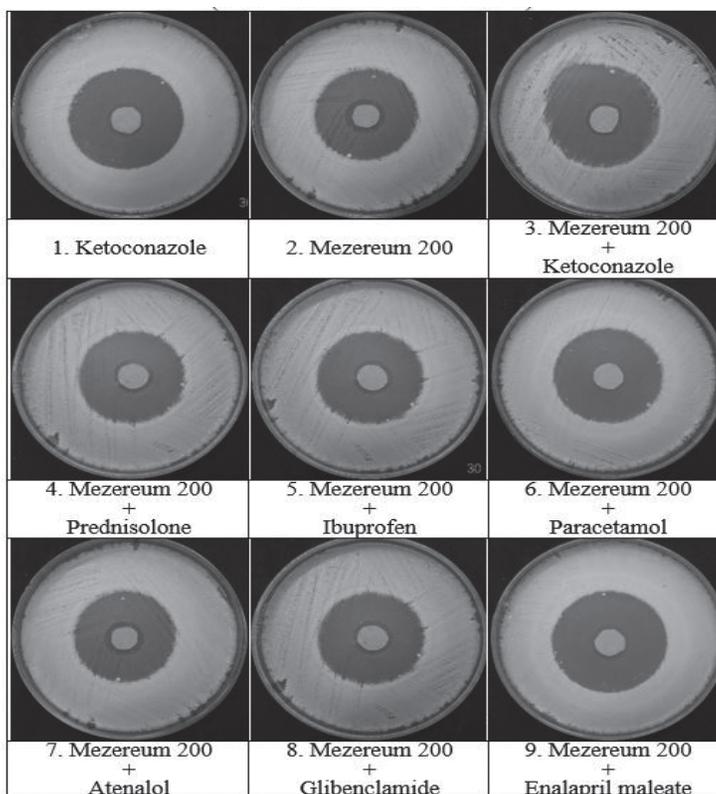
**TABLE-2**

Impact of Allopathic medicines admixed with Mezereum 200 on the growth of *Candida albicans* in comparison to Mezereum 200 alone assessed by "Inhibition Zone Technique" (Diameter of disc = 12 mm)

| Sn | Photo No. | Control | Allopathic medicine | Zone of Inhibition against <i>Candida albicans</i> (in mm diameter) |
|----|-----------|--------------|----------------------------------|---|
| 1. | 7103 | Ketoconazole | - | 40.00 mm |
| 2. | 7102 | Mezereum 200 | - | 37.00 mm |
| 3. | 7101 | - | Mezereum 200 + Ketoconazole | 39.00 mm |
| 4. | 7104 | - | Mezereum 200 + Prednisolone | 38.00 mm |
| 5. | 7105 | - | Mezereum 200 + Ibuprofen | 37.50 mm |
| 6. | 7106 | - | Mezereum 200 + Paracetamol | 37.00 mm |
| 7. | 7107 | - | Mezereum 200 + Atenalol | 38.00 mm |
| 8. | 7108 | - | Mezereum 200 + Glibenclamide | 37.00 mm |
| 9. | 7109 | - | Mezereum 200 + Enalapril maleate | 37.00 mm |

PLATE-2

Impact of Allopathic medicines admixed with Mezereum 200 on the growth of *Candida albicans* in comparison to Mezereum 200 alone assessed by "Inhibition Zone Technique"
(Diameter of disc = 12 mm)



Discussion

Earlier it was a common belief that Homoeopathic and Allopathic medicines should not be taken simultaneously for the same ailment but with the passage of time this idea modified to blanket ban of any sort of Allopathic medication whatsoever even for any other ailment as well. This notion might have percolated in their belief due to misinterpretation of what Dr. Hahnemann wrote in Aphorism § 242 of Organon of medicine which states that "*in an epidemic intermittent fever the first paroxysms have been left uncured or if the patients have been weakened by improper allopathic treatment then the inherent psora that exists in so many persons, although in a latent state, becomes developed, takes on the type of the intermittent fever, and to all appearance continues to play the part of the epidemic intermittent fever, so that the medicine, which would have been useful in the first paroxysms (rarely an antipsoric), is now no longer suitable*

and cannot be of any service and we have now to deal with a psoric intermittent fever".

No doubt Dr. Hahnemann was a genius with exemplary foresight. He very well knew that in days to come none of the patient will resort to homoeopathic consultation without having had taken Allopathic medicines for some or the other ailment or have been taking Allopathic treatment elsewhere for same complaint. He was also well aware of the side effects of the allopathic medicines thus mentioned in Aphorism § 259 of Organon of medicine³ "*Considering the minuteness of the doses necessary and proper in homoeopathic treatment, we can easily understand that during the treatment everything must be removed from the diet and regimen which can have any medicinal action, in order that the small dose may not be overwhelmed and extinguished or disturbed by any foreign medicinal irritant*".

Dr. Boenninghausen was one of those few

homoeopathic physicians who believed that restriction of all Allopathic medicine is not justified. He wrote 'Even more important, in this direction is the observation frequently made that, as a rule, only such medicinal substances act in a disturbing manner on substances given before as have homoeopathic relation to it, i.e. which have the tendency and virtue of producing similar effects on healthy persons. On this alone, the antidotal virtue rests'¹² Even Dr. Clarke was also not so keen on it.

Such restrictions were prevalent since the beginning of Homoeopathy. This idea seemed to flourish more after the re-emergence of homoeopathy. In India, Homoeopathy grew from 1920's to 1970's and Homoeopaths blindly followed Hahnemann's words and with each generation it became stronger.

In recent times, many Homoeopathic physicians experimented with this blind faith by loosening the restrictions and have found that it usually does not have any significant effect on the overall results.

Another group of homoeopaths now feel the need for 'individualized' restrictions depending upon the sensitivity of the patient, choice of remedy, dietary habits and aggravating articles in diet. Instead of restricting all articles of medicinal nature from diet, they restrict only those items which are not part of the routine diet of the patient or which have an adverse relation with the disease or the medicine because of the fact that nowadays indiscriminate use of Allopathic medicines had become a routine before patient genuinely consults the physician.

Homoeopathic medicines are potentised and are dynamic in nature while Allopathic medicines are in crude form and act at physiological level, then how the later can hinder the action of former in human subject as their level of action is different. It was not possible to demonstrate this phenomenon in human subjects. It was also difficult to quantify the amount of Allopathic medicines taken. Over and above the involvement of human psychology was the main bottle neck behind one's inability to conduct such study.

Thus an experiment was planned by the research team of Medical Mycology lab. of Gaurang Clinic and Centre for Homoeopathic Research, Lucknow to observe the impact of these Allopathic medicines on the efficacy of homoeopathic medicine, *Mezereum* 200, on the inhibition in the growth of human pathogenic fungus *Candida albicans* in biological experimental model.

The result of this *in-vitro* experiment has shown that there is no significant effect of Allopathic medicines on the inhibition in growth of human pathogenic fungus *Candida albicans* by homoeopathic medicine *Mezereum* 200 which prove that these restrictions have no scientific basis and they do not by any means hinder the efficacy of Homoeopathic medicines.

Conclusion

It is evident from this experiment that there is no negative effect of allopathic medicines viz. Prednisolone, Ibuprofen, Paracetamol, Atenolol, Daonil, Envas on the inhibition in growth of human pathogenic fungus *Candida albicans* by *Mezereum* 200 in *in-vitro* condition.

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