

A live toad serves as a medium for the inter-group transfer of anti-alcoholic effect of potentized *Nux vomica*

Indrani Chakraborty^{1,3}, Nirmal Chandra Sukul^{2,3},

Anirban Sukul^{3,4}, Rathin Chakravarty³

¹ Department of Zoology, Vidyasagar College for Women, Kolkata, West Bengal, India

² Department of Zoology, Visva-Bharati University, Santiniketan, West Bengal, India;

³ Molecular Homeopathy Research Unit, Kolkata, West Bengal, India

⁴ Sukul Institute of Homeopathic Research, Santiniketan, West Bengal, India

Background: A homeopathic potency above 12 CH is devoid of original drug molecules because it has crossed the Avogadro number. It has long been hypothesized that a homeopathic potency carries the imprint of original drug molecules in the form of three dimensional water structures preserved by ethanol. When a nursing mother takes a potency for her ailing baby it is cured. It is thought that the potency taken by the mother has converted the water structure in her body including her milk which in turn has cured the baby. In a series of experiments Sukul and his co-workers demonstrated that the effect of a potency could be transferred from one group of plants/animals to another through water in capillaries [1, 2, 3]. In the present study we have shown that the anti-alcoholic effect of *Nux Vomica* 200 CH is transferred through the body of a live toad to other toads as in the case of mother to baby. A homeopathic potency shows UV spectra distinct from its diluent medium of aqueous ethanol.

Objectives: To demonstrate that a potency effect can be transferred through the body of a live toad to other groups of toads connected through water to the live toad. Further, we want to see whether the UV spectra of drug solution and of water connected to the drug are similar in nature.

Methods: A live toad was held vertically with one hind limb dipped in *Nux vomica* 200 CH solution in a beaker and another limb in distilled water in another beaker. The second beaker was connected by wet cotton threads encased in polythene tubes to 5 beakers, each of which contained adult toads in distilled water. The hind limbs of the toad were greased at the base with vaseline to prevent seepage of water from one beaker to another over the surface of the hind limbs. A batch of toads was directly treated with *Nux vomica* 200 CH. An equal number of toads in distilled water served as the untreated control. After 30 min the control and the two batches of treated toads were kept separately in 209 mM ethanol solution. Toads, that stopped movement, were placed in a supine position on a dry surface. Failure to assume a normal sitting posture within a cutoff time of 60 sec was regarded as loss of righting reflex (RR). The experiment was replicated using large number of toads. UV spectra of *Nux vomica* 200 CH solution and of water before and after connection with the drug were obtained. After the experiment all the toads were released into their natural environment.

Results: The percentage of toads losing RR in the three groups of toads increased with time of exposure to 209 mM ethanol solution. The loss of RR was significantly delayed with the direct treatment group ($P < 0.001$, chi square test) and the connected groups ($P < 0.01$, χ^2 test) as compared to the control. The two former groups did not differ from each other significantly. UV spectra (Perkin-Elmer Lambda35) of *Nux vomica* 200 CH solution were similar to that of water connected to the drug solution.

Discussion: The skin of the ventral surface and of the limbs of the toads partly immersed in the anesthetic solution absorbs the solution directly [4]. Ethanol, after absorption through the skin interacts non-specifically with phospho-lipid bilayers at the lipid water interface of cell membrane. It alters the orientation of lipid head groups, and modifies the function of many different proteins in the central nervous system membranes thereby producing acute changes in many different cells and organs. Besides their effect on lipid bilayers alcohol also interacts directly with integral membrane proteins [5]. The biological effect of alcohol including anesthesia may result from a combination of alcohol-induced changes in cell membrane as well as specific membrane protein alcohol interactions [6].

A homeopathic potency such as *Nux vomica* 200 CH is thought to be specifically structured water preserved by ethanol. It is assumed that this drug after absorption through the skin modifies the structured water at the lipid-water interface thereby reducing the anesthetic effect of alcohol [7]. After absorption through one hind limb of a live toad the potentized drug modifies the global molecular network (GMN) of water inside the body of the toad. Thus water in contact with the other hind limb in the second beaker gets specifically structured and behaves as the potentized drug. From the second beaker the message of the drug is transmitted through capillary water in wet threads to other beakers containing water and test animals. The toads in the connected containers thus get the treatment effect as observed in our earlier study [3].

Conclusion: The antialcoholic effect of *Nux vomica* 200 CH could be transferred through the body of a live toad to other groups of toads. The drug did not undergo denaturation during its passage through the living body. That water carries the information of original drug is further evidenced by the spectral properties of water connected to the drug solution through capillary water.

Keywords: *Nux vomica* 200 CH, UV spectra, transmission effect, toads, righting reflex.

References:

- [1] Mondal S, Sukul (nee Chunary) S, Sukul NC. Water as carrier of information of heat shock and drug effect between two groups of *Adhatoda vasica* plants. Int. J High Dilution Res., 2012; 11(39): 60-68.
- [2]. Mondal S, Sukul S, Sukul NC. Transfer of effect of heat shock and drug treatment from one plant to another through water. J Alt. Med. 2012.
- [3]. Chakraborty I, Sukul NC, Sukul A, et al. 2012. Transfer of the anti-alcoholic effect of *Nux Vomica* 200 CH through water from one group of toads to another under alcohol anaesthesia. Int. J High Dilution Res, 2012; 11(41): 216-223.
- [4]. Tyler MJ. Frogs and toads as experimental animals, ANZCCART Fact Sheet A, 2009; 13: 1-7.
- [5]. Dopico AM, Lovinger DM. Acute alcohol action and desensitization of ligand- gated ion channels. Pharmacol Rev., 2009; 61: 98-114.
- [6]. Ingolfsson HI, Andersen OS. Alcohol effects on lipid bi-layer properties. Bio Phys J, 2011; 101(4): 847-855.

[7]. Sukul NC, Sukul A. Molecular mechanism of action of homeopathic potencies with reference to holism. *Environ Ecol*, 2009; 27: 71-77.



Licensed to [GIRI](#)

Support: authors declare that this study received funding from Dr. Bholanath Chakravarty Memorial Trust, Kolkata, West Bengal, India.

Conflict of interest: authors declare there is no conflict of interest

Received: 16 June 2013; Revised: 12 August 2013; Published: 30 September 2013.

Correspondence author: Nirmal Chandra Sukul, ncsukul@gmail.com

How to cite this article: Chakraborty I, Sukul NC, Sukul A, Chakravarty R. A live toad serves as a medium for the inter-group transfer of anti-alcoholic effect of potentized *Nux vomica*. *Int J High Dilution Res* [online]. 2013 [cited YYYY Month dd]; 12(44): 88-90. Proceedings of the XXVII GIRI Symposium; 2013 Sep 03-04; Bern (Switzerland). GIRI; 2013; Available from: <http://www.feg.unesp.br/~ojs/index.php/ijhdr/article/view/657/644>