Short Communication

Potency dependent activity of homeopathic nanomedicine- classical and quantum electrodynamical approach

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The effect of homeopathic medicine on biological and physical system is directly related to its potency [1]. However, from physico-chemical point of view it is difficult to explain this effect at such high dilution, as then the existence of even trace amount of particle is questionable.

It has been reported that during the process of potentization, a large amount of mechanical energy gets transferred to the medium due to succussion [2]. This energy in all probability reduces the size of the drug aggregates. The drug then penetrates easily through the membrane barrier, and thereby gives rise to enhanced activity of the medicine.

It has been experimentally proved by us and supported by others that indeed a reduction of size of the aggregates takes place with increase in potency [3]. Using five different homeopathic medicines, their sizes at three different potencies have been estimated and a

general mathematical expression relating the size of the particle (Y) and the corresponding potency (X) has been derived as follows

$$Y = a X^{-n}$$

The relation is valid for all those selected medicines, while “a” and “n” are characteristics of each medicine. Thus by measuring the size of medicine, the formula can be used to estimate the potency of the medicine, for which no other easy method is available.

We have recently shown that similar relation also holds good for several other medicines. As a typical example, the scanning electron microscopic pictures of *Arsenic album* at the potencies of 6C, 30C and 200C are shown in Fig. 1(a), 1(b) and (c). The graphical representation between the size (average of 5 measurements) and potencies is shown in Fig. 1(d).

Fig 1 . Scanning Electron Microscopic pictures of *Arsenic album* at the potencies (a) 6C, (b) 30C and (c) 200C. 1(d). size versus potency curve.

Using Scanning Electron Microscopic images, similar empirical relation has also been derived for three other medicines: Fig 2(a) Hepar sulphar, Fig.2(b) Nux vom and Fig. 2(c) Silicea .

Fig. 2. Potency vs Particle Size of (left) Hepar sulph, (center) Nux vom and (right) Silicea

The graphical representations of relation between the size of the homeo-nanomedicines and the potency (Figs. 1-2) indicate that the size reaches an asymptotic value and most importantly, further potentization does not change it significantly.

From classical mechanical point of view, the mechanical energy arising out of vigorous shaking i.e., succussion, reduces the size of the drug aggregates. It has been shown earlier that from quantum electrodynamical (QED) point of view, succussion is responsible for domain formation in the polar medium of the homeopathic medicine, which enhances the electrical property of the medium (4,5).

Thus we conclude that succussion is solely responsible for increasing the potency of the homeopathic medicine: by reducing its effective size from classical point of view and by enhancing the electrical property of the polar vehicle from quantum electrodynamical point of view.

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