



Objective Monitoring of Response of Homoeopathic Medicines using Medical Analyzer: An Abstract

(Editor: G D Jindal has sent this very useful article of 10 pages to publish in NJH. As space in NJH is at a premium, we have only give 2 page abstract here. The full article can be read on NJH website: www.njhonline.com)

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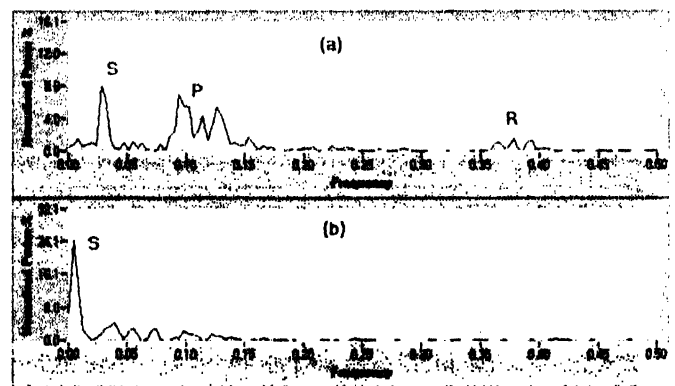
The constitutional drugs offered by the homoeopathic system of medicine have subjectively established their curative value over past two centuries. Yet these drugs have not received as wide an acceptance as modern medicine, probably because of the paucity of objective pharmacological data. Non-existence of medicinal substance in higher homoeopathic dilutions, prohibits the use of probing energy such as used in nuclear magnetic resonance or infrared spectroscopy, for characterizing the homoeopathic preparations. The other way left for obtaining objective data is, therefore, the monitoring of changes in physiological parameters, after administration of the medicines.

Biomedical Instrumentation Section of Electronics Division, Bhabha Atomic Research Centre, has developed an instrument, called Medical Analyzer, which is used for the assessment of autonomic nervous system (ANS) of the body. This system records a number of

physiological parameters such as heart rate (HR), respiration rate (RR), stroke volume (SV), cardiac output (CO) and peripheral blood flow (PBF) in the right and left upper extremity for a duration of approximately 5 minutes and then analyses the variations in these parameters in frequency domain. The variability of these parameters thus obtained, gives an insight into the contribution of sympathetic and para-sympathetic components of the ANS. Our pilot study on more than 200 subjects, has shown that different diseases modify the functioning of ANS specifically (reported elsewhere).

Encouraged with the above study, we have recorded the variability spectrums of HR and PBF in 10 control subjects, before and after intake of *Sulphur* 1M (8 subjects) and *Phosphorous* 1M (2 subjects) with following observations.

The following figure shows heart rate variability (HRV) in one subject, serial no 1, (a) before and



(b) after a dose of *Sulphur* 1M. As can be seen from the figure, there are three peaks centering around 0.03, 0.12 and 0.38 Hz respectively, labeled as S, P and R, which correspond to variations in the HR due to sympathetic and para-sympathetic stimulation and respiration respectively. It is interesting to observe that P and R disappear after administration of *Sulphur* 1M. Simi-



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lar response has been recorded in 4 subjects out of 8 (administered *Sulphur* 1M). In remaining 4 subjects, where, only sympathetic peak was observed before medicine, 2 or 3 peaks appeared after the administration of *Sulphur* 1M.

This observation is in accordance with the principle of homoeopathy stating that homoeopathic medicine causes symptoms of the disease when administered to a normal subject and it can remove the same set of symptoms when administered to a patient. This principle is illustrated in the form of P and R peaks. In normal subjects all the 3 peaks, comparable in size,

are expected in heart rate variability. Absence of these peaks signifies disease (S No 2, 4, 6 and 7), which appears after the intake of medicine, indicating restoration of health. On the other hand, presence of these peaks in S No 1, 3, 5 and 8 represent normal status before medicine, which becomes diseased by their disappearance after the ingestion of the medicine.

Blood flow variability (BFV) at the right and left wrist has shown interesting trend as 8 subjects administered *Sulphur* 1M manifested differently than the remaining 2 subjects administered *Phosphorous* 1M, as given in the following table.

S. No.		HRV				BFV(Right)				BFV(Left)			
		S	P	R	TP(X10 ⁵)	S	P	R	TP(X10 ²)	S	P	R	TP(X10 ²)
1	before	2	4	1	1.78	2	1	-	7.1	-	3	2	18.6
	after	2	1	-	2.69	2	-	-	120	2	2	-	47.3
2	before	2	-	-	2.3	3	1	-	40	4	-	-	35.8
	after	2	1	-	1.9	3	1	-	70.6	3	-	-	35.6
3	before	2	4	2	2.1	4	-	-	78.7	4	1	-	51.5
	after	4	1	-	4.4	3	-	-	75.1	2	-	-	106.6
4	before	2	-	2	1.2	3	4	-	8.9	2	4	1	19.9
	after	1	4	2	1.9	3	-	-	8.2	3	-	-	4.1
5	before	3	1	2	2.6	2	3	2	4.9	2	4	2	10.2
	after	2	-	2	1.7	3	-	-	42.4	2	1	-	47.7
6	before	2	3	-	1.5	4	2	1	4.5	2	-	1	2.3
	after	1	4	1	3.2	3	-	-	33.3	4	2	-	12.1
7	before	2	-	-	7.2	2	1	2	1.8	4	-	-	71.7
	after	2	-	1	2.9	2	-	-	62.5	2	-	-	112.1
8	before	2	3	1	14.9	-	2	1	15.1	2	2	1	16.5
	after	2	1	-	11.5	1	1	-	10.5	2	-	-	21.2
9	before	4	1	-	6.2	3	-	-	60.6	3	-	-	178.6
	after	3	2	1	5.6	3	1	-	10.3	4	1	-	128.3
10	before	3	1	-	3.9	2	-	-	10.9	2	-	-	13.5
	after	2	-	-	19.7	2	1	1	10.6	3	1	-	29.0

It is too early to make any final conclusion at this stage; however the present study gives preliminary evidence for assertion that homoeopathic medicines in dilutions higher than the material existence, make reproducible

and recordable changes in the autonomic nervous system. It is for the homoeopathic fraternity to come forward and employ these research tools to earn the higher level of acceptance by the general population. □