## Effect of 'pranic' healing in chronic Musculoskeletal pain - a single Blind control study

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#### Abstract

**Objective** : To compare the immediate effect of pranic healing, a non-touch non pharmacological method of treatment, in chronic musculoskeletal pain with a placebo session of random hand movements.

**Design:** A self control single blind study. Patients were blind folded with an eye band on both days of the healing and placebo session.

*Setting:* Patients admitted for the treatment of chronic pain in the residential health home of Vivekananda Kendra Yoga Research Foundation, Bangalore, South India.

**Subjects:** 50 Patients with chronic non-malignant continuous musculoskeletal pain of more than 6 months duration. Group A (N=25) had placebo on first day and group B (N=25) had pranic healing on first day.

*Intervention:* Pranic healing of 25 minutes compared to placebo session of 25 minutes carried out on 2 consecutive days.

*Main outcome measures:* Pain Analogue scale and physiological measures of sympathetic activity namely heart rate, respiratory rate, galvanic skin conductance, blood pressure and finger plethysmography.

**Results:** Highly significant reduction in pain and sympathetic activity in pranic healing group (student's t- test p < 0.001) and non-significant change in placebo group. Multivariate discriminant analysis followed by Wilks' Lambda criteria for significance showed pranic healing is the best in both groups A and B.

**Conclusion:** Pranic healing when performed in the standardized method by a trained healer is effective in reducing continuous chronic pain of musculoskeletal origin, within 25 minutes as compared to placebo random hand movements which appears similar to the standard method of pranic healing.

Healing through different procedures of balancing the subtle energy system in the energy body has been practiced as an <u>art</u> in ancient cultures of China and India for thousands of years. According to the Chinese system of acupuncture, acupressure and qigong therapy, blocks occur in the channels of flow of this subtle energy called 'chi' or 'qi' resulting in <u>illness</u>.

The aim of therapy is to restore the uniform balanced flow of 'chi' in all the channels<sup>1</sup>. Similarly the Indian system of yoga deals with this imbalance of energy, called 'prana', through breathing practices and meditation<sup>2</sup>

While the system of spiritual healing and Therapeutic Touch is said to correct these imbalances through touch and prayer, the School of Pranic Healing in India claims to correct these imbalances in the energy body by a non-touch method.

Investigations are underway to detect the presence of this energy which is different from all known physical electromagnetic energy fields. Bio-electrography is an attempt to get photographs of this energy field. Chouhan and Rajaram in 1986<sup>3.4</sup> standardized and measured the corona images of fingers obtained on a background of high frequency high voltage electrical fields. They analyzed the bio-electrography pictures of 246 subjects with cancer of the cervix uterus and defined a malignancy specific pattern for early detection of cancer. Richard Pavak<sup>5</sup> presented the beneficial effect of 'shen' - a specific form of qigong therapy in the chronic pain of dysmenorrhoea, migraine and chronic low back pain syndrome. Jia Zin and Jia Jinding<sup>6</sup> demonstrated the amount and

density of callus formation to be significantly higher in emitted 'qi' group compared to control group in experimentally induced fractures in rabbits. Loh, L, et al <sup>7</sup> found the benefits of acupuncture comparable to medical treatment in migraine and tension headache.

Pranic healing (PH), standardized and taught by Master Chao Kok Sui<sup>8</sup> from the Philippines is a procedure of manipulating this <u>pranic energy</u> body which is felt and or seen as an aura or energy field around the physical body. Present study has been designed to validate the immediate effect of a pranic healing session in chronic pain through a self-controlled design.

### Materials

50 subjects with chronic pain who had volunteered to undergo a non-pharmacological <u>voga therapy</u> inpatient program were taken up for the study on first two days of their stay before they started practicing yoga. Patients with chronic continuous pain of non-malignant cause who satisfied the criteria for chronic pain (Melzack)<sup>9</sup> of more than six months duration were included in the study. All 50 patients had pain of musculoskeletal origin. The causes of pain were, pain at rest due to chronic tension headache, low back pain, knee pain (osteoarthritis), frozen shoulder, cervical spondylitis, arthralgia in multiple joints and generalized muscular pain (table 1).

Patients who were getting intermittent episodic pain or pain only during activity were not included in the study.

# METHOD

After explaining the nature of the therapy, written consent was obtained for 30-minute <u>pranic healing</u> session on two consecutive days. Subjects were requested to wear thin cotton casual dress for the healing session. After initial assessments in the laboratory, subjects were seated on a comfortable stable stool in the annexure room of the laboratory which is quiet, safe and open. Subjects were blind-folded and checked for comfort and accuracy.

The healer began her therapy with an initial prayer, energizing the palm of her hand (two min.), and moving her hand over the surface of the body (about five centimeters away) in a systematic manner from head to toe.

The healing procedure involves working with the prana (subtle energy) body which is supposed to be felt and or seen by the trained healer as an aura around the physical body. The healing involves three steps:

### Step one.

Scanning for abnormalities in the energy field (aura) and energy pools (charkas)

### Step two.

The healer 'cleanses' the abnormalities.

### Step three.

'Energizing' with suitable quality and quantity of energy to the required part.

All these actions are done by hand movement of the healer all around the body by the non-touch method.

The session ends by 'de-linking' the healer and the healed through hand movement and a closing mental prayer. The whole procedure lasts 25 minutes.

The same healer carried out the placebo session (P) on the next day keeping all other conditions constant. This time the healer moved her hands at the same distance from the body for the same duration(25 minutes) but in a random way, without going through the standard organized three step healing procedure. For an untrained person these movements appear similar to the healing session.

Patients were told that both days were healing sessions and were again blindfolded. All other conditions were kept constant to make it a single blind study.

Some 25 subjects (group A) had the control session on the first day and PH sessions on the second day were reversed with PH session on first day and control session on second day in 25 subject s (group B). Assessments were done immediately before and after the session on the both days, using the following tests.

	Table 1 Demographic dat	a
Variables	Pranic Healing (PH)	Placebo (P)
Number of patients	50	50
Males	25	25
Age, years mean (SD)	46.59 (12.67)	45.71 (10.99)
Duration of pain	> 6 months	> 6 months
Causes of pain		
Tension Headache	7	6
Low Back pain	6	6
Knee pain (Osteoarthritis)	2	3
Frozen shoulder	2	2
Cervical spondylosis	2	2
Arthralgia in multiple joints	2	2
Generalised muscular pain	4	4

Table II

	Wi	nole group n = 50		
Pranic healin	g Before	After		
Parameter	Mean $\pm$ S.D.	Mean $\pm$ S.D.	't' value	Sig
PAS	61.14 ± 31.21	29.08 ± 25.98	-9.82	ojeoje
HR	$89.61 \pm 12.73$	$86.12 \pm 11.36$	-5.72	**
RR	$18.34 \pm 3.76$	17.59 ± 3.59	-2.54	*
GSC	$3.80 \pm 3.07$	2.59 ± 3.35	-5.82	***
PHT	$1.92 \pm 0.97$	$1.58 \pm 1.00$	-3.32	*
SYS	$125.80 \pm 15.33$	$116.80 \pm 14.03$	-8.28	***
DIA	$84.64 \pm 10.45$	$78.05 \pm 10.54$	-7.10	okok:
		Whole group $n = 50$	I	

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Control	Before	After		
Parameter	Mean ± S.D.	Mean $\pm$ S.D.	't' value	Sig
PAS	47.82 ± 36.99	47.68 ± 36.64	-0.22	NS
HR	$89.13 \pm 11.44$	$86.72 \pm 11.90$	-1.69	**
RR	$18.27 \pm 4.56$	$18.16 \pm 4.48$	-0.47	NS
GSC	$4.62 \pm 5.05$	$4.81 \pm 5.03$	1.56	NS
PHT	$1.94 \pm 1.04$	$1.92 \pm 0.89$	-0.27	NS
SYS	$119.64 \pm 15.60$	$118.34 \pm 5.56$	-2.09	*
DIA	$79.02 \pm 9.56$	$237.80 \pm 1131.73$	0.99	NS

Legend for Table 2:

PAS - Pain Analogue Scale HR - Heart Rate RR - Respiratory rate DIA - Diastolic Blood Pressure \*p < 0.01 \*\* < 0.005. GSC - Galvanic Skin Conductance FBA - Finger blood flow Amplitude on Plethysmography SYS - Systolic Blood Pressure

## Pain analogue scale

This is considered to be a simple and reliable measure of pain consisting of a 10 centimeters horizontal line marked in the center of a clean white sheet with 'nil pain' and 'worst possible pain' written in words at the two extremes and used to assess the severity of pain. The subject indicates his degree of pain by marking a dot on this line. Different sheets were used before and after the session, coded and kept away for measurements by a non-healer.

### Physiological measures

Autonomic nervous functions - namely, heart rate, respiratory rate, galvanic skin conductance and finger plethysmography were recorded before and after each session on a model 10 polygraph (Recorded and Medicare, Chandigarh, India).

### **Blood Pressure**

This was recorded by using a mercury sphigmoinanometer (Diamond Company)

### RESULTS

Table 1 shows the demographic data of patients in two groups.

Students two-tailed 't' test performed on the values obtained immediately before and after the PH and P sessions (table 2), shows that in the PH group Pain Analogue Scale, heart rate, galvanic skin conductance and blood pressure have changed to a highly significant degree (p<0.001) with a lesser degree of significance in respiratory rate (p=0.002) and amplitude of pulse wave in finger plethysmography (p=0.01).

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			Group	p A (n = 1	25)			
		Day 1 = contro		Day 2 = Pranic healing				
Parameter	Mean ± S.D.	Mean ± S.D.	't' valu	e p	Mean ± S.D.	Mean ± S.D.	't' value	Sig
PAS	66.52 ± 36.78	67.80 ± 34.49	1.35	NS	64.12 ± 32.93	64.12 ± 32.93	-7.47	<.001
HR	88.06 ± 10.51	85.37 ± 11.06	-3.20	< 0.01	88.71 ± 11.52	85.33 ± 10.78	-4.57	<.001
RR	18.15 ± 3.69	18.54±3.30	1.35	NS	18.40 ± 3.83	18.29 ± 2.87	-0.29	NS
GSC	2.36 ± 1.41	2.52±1.72	1.12	NS	5.12 ± 3.76	3.27 ± 2.97	-5.16	<.001
PLETHYS	$1.78 \pm 0.89$	1.79 ± 0.86	0.04	NS	1.90 ± 0.87	1.60 ± 0.92	-2.04	NS
BP SYS	121.20 ±19.87	120.08 ± 18.6	-1.26	NS	125.0 ± 19.57	115.84 ± 16.09	-5.59	<.001
DIAST	78.84±12.98	78.12 ± 11.73	-0.96	NS	83.28 ± 13.42	77.48±0.74	-2.201	4S
			Group	o B (n = 2	25)			
		Day 1 = contro	1			Day 2 = Prani	c healing	
Parameter	Mean ± S.D.	Mean ± S.D.	't' valu	e p	Mean ± S.D.	Mean ± S.D.	't' value	Sig
PAS	58.16 ± 29.76*	33.96 ± 26.94	-7.74	< 0.01	29.12 ± 26.71	27.56 ± 26.61	-2.03	NS
HR	90.51 ± 14.02	86.90 ± 12.07	-3.65	< 0.01	90.24 ± 12.42	88.06 ± 12.75	-3.60	<.001
RR	12.28 ± 3.76	16.89 ± 4.29	-3.29	< 0.01	18.39 ± 5.38	17.77 ± 4.94	-1.72	NS
GSC	2.47 ± 1.21	1.90 ± 1.19	-4.74	< 0.01	2.36 ± 1.4	$12.52 \pm 1.70$	1.12	NS
PLETHYS	$1.93 \pm 1.07$	$1.58 \pm 1.08$	-2.61	< 0.02	2.10 ± 1.17	2.04±0.92	-0.32	NS
BP SYS	126.60 ±9.74*	117.76 ± 11.88	-6.05	< 0.01	118.08 ± 9.81*	116.60 ± 11.79	-1.66	NS
DIAST	88.00 ± 6.25*	79.76 ± 7.24	-2.20	NS	79.20 ± 4.25*	77.48±0.74	-2.20	NS

In P group all the major parameters are non-significant except heart rate (p<0.001) and blood pressure (0.05). Similar changes are seen in the sub groups A and B who had reserved the days of healing and placebo sessions (table3). Another interesting point that may be noted from this table is that the initial mean values (for PAS, systolic and diastolic BP) in group B (PH on the first day) are significantly low (p<0.001) as compared to group A (P session first day) where the differences for the initial values are non-significant for these there parameters.

Could this difference be due to the lasting effect of PH the previous day or other factors such as, leisure or strangeness of being away from home, change of diet, familiarity of the healer and the healing session, and so on, factors which were constant for both groups? Table 4 shows the transformation matrix obtained after Multivariate discriminant analysis with Wilk's Lambda test for significance11. This also shows that the PH group had the best results in both group. A (88 per cent) and group B (92 per cent).

## DISCUSSION

In April 1998, Dr Linda Rosa and colleagues 12 published their studies on the ability of 21 senior Therapeutic Touch practioners to 'perceive' the energy field, in a blinded condition. The therapists were asked to state whether the investigator's unseen hand hovered above their right or left hand. They gave the correct answer only in 123 out of 280 trials, a success rate of 44 per cent which could have occurred purely by random chance. As a result the researchers concluded that the claims of Therapeutic Touch has no scientific basis. Our present single blind self-control study, comparing the standard technique of pranic healing with a placebo session of random hand movements, has clearly shown immediate reduction in pain (PAS) in patients with chronic pain of more than six months duration.

The highly significant reduction in sympathetic activity (HR, RR, GSC amplitude of pulse wave on finger plethysmography and BP) seen in the PH group is further objective evidence for the physiologically relaxing effect of PH.

Considering the negative result of Dr.L.Rosa et al, we may wonder how PH could work if the healer does not sense the energy fields and recognize the abnormalities. The ability of the healers of the PH group to perceive <u>pranic energy</u> field may be different from that of Therapeutic Touch practioners. We need to design a study to check this ability in our healers.

Assuming that our healers also may not have perceived the prana field during the first step (scanning) of PH, could it be that steps two and three - that is, the general cleansing and energizing of the prana body with a divine prayer - is responsible for the therapeutic effect observed in this study?

The first step of scanning (to perceive and or see the prana) may not be demonstrable in less experienced healers and if the healer perfects this step it may be that the therapeutic procedure would become even more effective for deeper and longer corrections. More work needs to be done to answer such questions.

The next question that would arise in this study is about the mechanism of pain relief and reduction in sympathetic tone. The explanation offered by the healers is that, during chronic pain the subtle energy fields are disturbed and it shows up in the physical body as pain. The imbalance could be induced by various factors at the physical level (trauma, aging) or at the mental level (depression, anxiety, stress).

		Tz	ABLE IV			
		Predicted	Group Men	ıbership		
	N	GroupA		N	Group B	
		1	2		1	2
Group C	25	21 84%	04 16%	25	20 80%	5 20%
Group PH	25	3 12%	22** 88%	25	2 8%	23** 92%
% of grouped cases correctly Classified	25	88%		25	88%	

Legends for Table IV:

Multivariate descriminant analysis with Wilks Lambda Criteria for significance.

Group A - Control on first day. Pranic healing on second day.

Group B. Pranic healing on first day. Control on second day.

\*\* Best results in PH group in both Group A (88%) and Group B(92%)

The healer sets right the abnormal in the pranic body through transferring the divine energy that is gathered from the cosmic energy fields and thus balances the energy flows. This is experienced by the patients as relief from pain and deep rest. Reduction in sympathetic activity seen immediately after the session can be due to reduction in pain. At this stage of understanding of science it is not possible to explain the exact mechanism of pranic healing until we are able to get more objective evidences and measures of the energy fields described by these healers.

The conclusion of this single blind control study is that PH reduces the pain and sympathetic activity after the of musculoskeletal origin and that this reduction is not placebo hand movement session which may appear similar to PH Session in all its external appearances.

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