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# A Study On The Role Of Chromotherapy In Managing Hypertension: A Single Case Study

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#### **ABSTRACT:**

**Background:**Research on colour healing aims to heal illness by re-establishing the body's natural equilibrium of colour energy. It demonstrated how particular colours affect different body parts. Colour therapy does not involve any physical contact. In its most basic form, colour therapy is using different colours to alleviate pain and mental suffering. These amazing colour schemes greatly enhance both physical and emotional well-being. **Materials and Methods:** The study was conducted at the Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital in Kulasekharam, Tamil Nadu, India. There was only one case study showcased. After the purpose of the study was described, verbal consent was acquired. The study was conducted over 15 days. A sphygmomanometer and the routine documentation of symptom changes are among the characteristics of this investigation. **Results:** The JASP program version 0.95.3 was used to analyze the data. It is evident that chromotherapy treatments have resulted in a notable drop in blood pressure. The symptoms of diastolic blood pressure (SBP) (t 5.976, p-value < 0.001) and systolic blood pressure (DBP) (t 4.583, p-value < 0.001) were

evidently lessened by the chromotherapy. **Conclusion**: Given the advantages of chromotherapy, it would be wise to incorporate it into standard treatment plans to effectively manage the symptoms of hypertension and lessen the negative consequences of drug use. In order to prevent and treat hypertension by lowering its root cause, chromotherapy employs a lifestyle that incorporates colour therapy techniques.

**Keywords:** Breathlessness, hypertension, elevated blood pressure, chromotherapy, high BP, palpitation.

#### INTRODUCTION

Electromagnetic radiation, or light, is the result of natural electric and magnetic field fluctuations. Colour is a result of the interaction between matter and energy, and light is energy. Each one of the colours has a set wavelength, frequency, and energy quantity. Only electromagnetic radiation with wavelengths approximately between 380 and 780 nm can reach the human eye. The visible spectrum, sometimes known as visible light, is this small portion. The various electromagnetic frequencies that make up visible light are related to the colours of the rainbow—red, orange, yellow, green, blue, indigo, violet, and all of their vibrations. Colours are the source of the human body, they stimulate the body, and they are in charge of ensuring that the body's many systems operate as intended <sup>1</sup>. Every organ and limb in the body has a unique colour. Every form has its own frequency or vibrational energy, and all organs, cells, and atoms are made of energy. The frequency of these colours causes each of our organs and energy centres to vibrate and harmonize. One can presume that the body is either ill or at least not operating properly when different bodily sections diverge from these expected normal vibrations.

#### **METHODOLOGY:**

The study was conducted at the Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital in Kulasekharam, Tamil Nadu, India. There was only one case study offered. A 45-year-old woman is eligible for the research. Verbal consent was acquired when the study's purpose was explained. The investigation was conducted over a 15-day period. A Sphygmomanometer and the routine documentation of symptom changes are among the characteristics of this investigation. Patients undergo these therapies in addition to chromotherapy, green and blue colour visualization, green solarized water, green and blue colour breathing, and lifestyle management. The volunteer was helpful and well-educated.

#### Criteria:

The verbal consent was given. A female patient with hypertension. She should be able to read, write, and comprehend in both Tamil and English.

#### Study design:

Single case study ---> Pre assessment ---> Chromotherapy Intervention for 15 days ---> Post assessment ---> Statistical analysis by JASP 0.95.3 version software and interpretation of results.

**Methods:** One case study was showcased. The study took place over a period of fifteen days. Preassessments were carried out prior to the intervention, and post-assessments were carried out after the 15-day implementation.

### Treatment protocol:

The patient received chromotherapy treatment. These include green solarized water, green and blue colour breathing, green and blue colour visualization. They used the following chromotherapy regimen for 15 days.

S.NO	7 AM	11 AM		5 PM			
1	green and blue	Green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			
2	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			
3	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			
4	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			
5	green and blue	green	solarized	green and blue			
	colour breathing	wat <mark>er</mark>		colour			
			<u> </u>	visualization			
6	green and blue		solarized	green and blue			
	colour breathing	wat <mark>er</mark>		colour			
_			<u> </u>	visualization			
7	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
0	1 11			visualization			
8	green and blue	green	solarized	green and blue			
	colour breathing	water		colour visualization			
9	green and blue	groop	colorizod				
9	colour breathing	green	solarized	green and blue colour			
	colour breating	water		visualization			
10	green and blue	green	solarized	green and blue			
10	colour breathing	water	301a112Cu	colour			
	colour sicuming	water		visualization			
11	green and blue	green	solarized	green and blue			
	colour breathing	water	00.0	colour			
				visualization			
12	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
	_			visualization			
13	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			
14	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			
15	green and blue	green	solarized	green and blue			
	colour breathing	water		colour			
				visualization			

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#### **RESULTS**

This study aimed to assess the efficacy of green and blue colour breathing, green solarized water, green and blue colour visualization, and chromotherapy in the treatment of hypertension. Data were collected both before and after the intervention. Based on the results, blood pressure was unpleasant. The degree of hypertension has decreased, and general health has improved. Blood pressure pain is one of the characteristics that has clearly improved. The data analysis was performed using JASP version 0.95.3. It is clear that the combination of chromotherapy, green and blue colour visualization, green solarized water, and green and blue colour breathing significantly decreased the symptoms of hypertension. Both the SBP(t 5.976, p-value < 0.001) and DBP(t 4.583, p-value < 0.001) symptoms were clearly decreased by the combined chromotherapies.

**Abbreviations:**{COV- Coefficient of variation, SEM- Standard error of mean}

#### Table 1

Pre- Systolic	Mean	Std. Deviation	SEM	Variance	COV
	136.1	5.208	1.345	27.12	0.038

Table 1 shows, the pre systolic descriptive analysis

#### Table 2

Post- Systolic	Mean	Std. Deviation	SEM	Variance	COV
	129.5	3.583	0.925	12.84	0.028

Table 2 shows, the post systolic descriptive analysis

#### Table 3

Pre- diastolic	Mean	Std.  Deviation	SEM	Variance	COV
anastone	85.47	3.889	1.004	15.12	0.046

Table 3 shows, the pre diastolic descriptive analysis

#### Table 4

diastolic   Deviation	
84.27   3.693   0.954   13.64	0.044

Table 4 shows, the post diastolic descriptive analysis

#### Table 5

			95% con	fidence			
Pre-	Mean	SE	Mean difference				P-
Post	difference	difference	Lower	Upper	t	df	Value
Systole	6.667	1.116	4.274	9.059	5.976	14	< 0.001

Table 5 shows, the pre systolic and post systolic t test

Table 6

Pre- Post	Mean difference	SE difference	95% confidence Mean difference		t	df	P- Value
diastole			Lower	Upper			
	1.200	0.262	0.638	1.762	4.583	14	< 0.001

Table 6 shows, the pre diastolic and post diastolic t test

#### **DISCUSSION**

The study's primary goal was to assess how chromotherapy treatments affected the quality of life and symptom reduction, including blood pressure issues, in individuals with hypertension. The parameters employed in this study were chromotherapy, green and blue colour visualization, green solarized water, green and blue colour breathing, and frequent symptom changes <sup>2</sup>. The study's primary goal was to assess how chromotherapy treatments affected the quality of life and symptom reduction, including blood pressure issues, in individuals with hypertension. The parameters employed in this study were chromotherapy, green and blue colour visualization, green solarized water, green and blue colour breathing, and frequent symptom changes. Chromotherapy is one of the treatments that can help people with hypertension. They are regarded as therapeutic methods that do not involve the use of drugs. Any pathological ailment, whether acute or chronic, can be effectively treated with these methods. Instead than only treating the underlying problem, chromotherapy aims to promote holistic recovery <sup>3</sup>. Treatment with chromotherapy is required to reduce the symptoms of hypertension. Chromotherapy, which includes visualizations of green and blue colours, green solarized water, and breathing in green and blue hues, can significantly lower blood pressure. It is converted into a colour by the photoreceptors in the retina, which in turn triggers the pituitary and pineal glands to release endorphins and serotonin. These hormones are released in reaction to light in order to preserve psychological well-being by regulating emotions, mood, and conduct 4. The green and blue light used in this study precisely reflected green and blue light, which has been shown to lower blood pressure. We can speculate that chromotherapy may alleviate the majority of blood pressure discomfort sensations <sup>5</sup>. The degree of discomfort was, however, less on the fifteenth day than the first. However, on the fifteenth day, the level of discomfort was lower than on the first day. The outcomes demonstrated the effectiveness of the interventions provided when used as a substitute treatment for hypertension.

#### **CONCLUSION**

Future studies have shown that alternative medical systems can effectively treat hypertension. Stress-reduction techniques, green and blue colour visualization, green solarized water, and green and blue colour breathing are more common among hypertensive individuals. To effectively manage the symptoms of hypertension and lessen the negative effects of drug use, it would be prudent to incorporate the chromotherapy-covered biotherapies into standard treatment plans.

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