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# COMPARATIVE STUDY OF VIRECANA KARMA WITH AND WITHOUT MATRA VASTI IN MANAGING STAGE I ESSENTIAL HYPERTENSION

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#### **Abstract:**

Hypertension, characterized by elevated blood pressure levels, poses a substantial global health challenge. Ayurveda offers therapeutic interventions such as Virechana Karma, Urovasti, and Matravasti for its management. This comparative clinical study aimed to assess the effectiveness of these interventions in treating Stage I essential hypertension with Ucca Raktacapa. Sixty participants were randomly assigned to two groups: Group A received Virechana Karma followed by Urovasti, and Group B received Virechana Karma followed by Urovasti and Matravasti. The primary outcome measure was the reduction in systolic and diastolic blood pressure levels. Secondary outcomes included changes in lipid profile, quality of life, and adverse events. Both groups showed significant reductions in blood pressure levels, with Group B demonstrating a greater reduction compared to Group A. These results indicate that the combination of Virechana Karma, Urovasti, and Matravasti shows promise as an effective therapeutic approach for managing Stage I essential hypertension.

**KEYWORDS:** Virecana, Urovasti, Matravasti, Ucca Raktacapa, Essential hypertension.

# **Introduction:**

Hypertension, a condition characterized by persistently elevated arterial blood pressure, is a leading contributor to cardiovascular disease and premature death globally (1). It poses a significant cardiovascular risk and substantially increases cardiovascular mortality. The prevalence of hypertension rises with age, affecting more than 60% of individuals over 60 years old, making it a primary cause of cardiovascular disease and premature mortality worldwide[1].

High blood pressure is classified into primary/essential hypertension, where the cause is unknown, and secondary hypertension, which is linked to other medical conditions or specific medications. In Ayurveda, there is no direct equivalent to hypertension. R.R. Desai correlates hypertension with Ucca raktacapa, while Ayurvedic texts like those by Acarya Caraka link it to Vata-Pitta Pradhana Rakta Pradoshaja Vikara. According to Caraka, when Vata is obstructed by Pitta, Kapha, Meda, and Rakta, diseases like hypertension manifest. For essential hypertension, Vyana Vayu is primarily implicated, manifesting as a disorder of Bahya, Madhyama Rogamarga, and Marmagata Vyadhi. Treatment focuses on Vasti for alleviating aggravated Vata, leading to approaches such as Urovasti (Ca. Si 1/38-40)[2].

# Aims and Objectives:

i. To assess the effectiveness of Virechana Karma (using Trivrit churna) followed by Urovasti (using Ksirabala taila) in managing Ucca Raktacapa, focusing on Stage I Essential Hypertension.



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- ii. To evaluate the effectiveness of Virechana Karma (using Trivrit churna) followed by Urovasti and Matra Vasti (using Ksirabala taila) in managing Ucca Raktacapa, with a specific focus on Stage I Essential Hypertension.
- iii. To compare the effectiveness of Virechana Karma using Trivrit churna followed by Urovasti (using Ksirabala taila) with and without Matra Vasti in managing Ucca Raktacapa, emphasizing Stage I Essential Hypertension.
- iv. To propose a straightforward and cost-effective treatment approach for Ucca Raktacapa.

# **Materials and Methods:**

A total of 60 patients were selected from the outpatient department (OPD) and inpatient department (IPD) of S.V. Ayurvedic Hospital, Tirupati, Andhra Pradesh, and randomly assigned to two groups[3].

- **Group A:** Comprised of 30 patients who underwent Virechana Karma with Trivrit churna followed by Urovasti using Ksirabala tailam.
- **Group B:** Comprised of 30 patients who underwent Virechana Karma with Trivrit churna followed by Urovasti and Matra Vasti using Ksirabala tailam.

# **Materials Required:**

- For Snehapana: Indukantha Ghrita [4]
- For Virechana: Trivrit churna [5]
- For Urovasti and Matra Vasti: Ksirabala tailam [6]

#### **Inclusive Criteria:**

- i. Patients aged between 20 to 60 years.
- ii. Patients presenting with signs and symptoms of Ucca Raktacapa.
- iii. Patients exhibiting signs and symptoms of Stage I Essential Hypertension.
- iv. Patients eligible for Virechana and Urovasti.
- v. Patients eligible for Virechana, Urovasti, and Matra Vasti.

#### **Exclusive Criteria:**

- i. Patients below 20 years or above 60 years of age.
- ii. Patients diagnosed with HIV, TB, or other systemic disorders where withdrawal from modern medications is not feasible.
- iii. Patients with uncontrolled diabetes.
- iv. Pregnant patients with hypertension.
- v. Patients who do not meet the inclusive criteria.

# **Study Design**

#### Method of Administration of Virechana

#### Purva Karma:

- i. Deepana and Pacana were conducted using Chitrakadi Vati, with dosage and duration tailored to the patient's Agni and Koshta[7].
- ii. Duration typically ranged from 3 to 5 days, depending on the attainment of Nirama lakshanas.
- iii. Snehapana commenced with Indukantha ghrita. Patients were instructed to consume liquid, hot, non-provoking meals the day before.
- iv. Patients were instructed to evacuate bowels before Snehapana. Dosage began at 30 ml, increasing daily by 30 ml based on Avarohana matra.
- v. The total duration of Snehapana varied based on individual Agni and Koshta, typically spanning 3 to 7 days.
- vi. Snehapana was administered daily at 6 AM. Patients were advised to gargle with warm water and take a brief walk post-administration, frequently drink hot water, and consume light, warm meals as desired.



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vii. Upon achieving Samyak Snigdha Lakshanas, patients received 3 days of Abhyanga with Nirgundi Taila and Nadi Sweda. They were instructed to consume Amla and Pitta vriddhikara ahara before Virecana and ensure restful sleep.

#### Pradhana Karma:

On the day of Virecana, patients were instructed to evacuate their bowels. Trivrit Churna was administered on an empty stomach around 9 AM, with dosage adjusted according to Koshta. Patients were advised to pass stools as needed and rest, with Ushnodaka pana recommended. The number of Vegas (bowel movements) was recorded[8].

#### Paschat Karma:

- i. Patients were advised to take warm water baths (Ushnodaka snana), follow Samsarjana krama (gradual reintroduction of diet), and eat only when hungry, ensuring adequate rest.
- ii. Samsarjana Krama was tailored based on the type of Suddhi achieved.

#### **Urovasti:**

Urovasti was administered using Ksirabala tailam for 7 days.

**Table no: 1: Showing PAIRED T- TEST summary of Siro ruk (Headache)** 

			Ÿ.,	· · ·				
	Mean + S.I	D		SED				
Groups	0th Day	Im	Immediately after Treatment	MD		t value	p value	%
			•					
			. 0		0.000	• • • • • •		
Group-A	$2.50 \pm 0.90$	2.17	<u>+</u> 0.65	0.33	0.088	3.8079	P = 0.0007	13.2
Group-B	$2.50 \pm 0.97$	1.60	<u>+</u> 0.67	0.90	0.147	6.1388	P< 0.0001	36

1	Mean <u>+</u> S.I			SED			
Groups	0th Day	A after follow up	MD		t value	p value	%
Group-A	$2.50 \pm 0.90$	2.00 <u>+</u> 0.74	0.50	0.104	4.7848	P< 0.0001	20
Group-B	2.50 <u>+</u> 0.97	1.17 <u>+</u> 0.38	01.33	0.161	8.2605	P< 0.0001	53.2

## **Effects on Bhrama (Dizziness):**

The impact of Virechana and Urovasti (Group A) on Bhrama shows a statistically significant effect (P=0.0001) immediately after treatment completion and an extremely significant effect (P<0.0001) during follow-up. In contrast, the impact of Virechana, Urovasti, and Matra Vasti (Group B) on Bhrama demonstrates an extremely significant effect (P<0.0001) immediately after treatment and maintains an extremely significant effect (P<0.0001) during follow-up compared to baseline. Group B shows a significantly higher impact compared to Group A.

Table no. 2: Showing PAIRED T- TEST summary of Bhrama: (Dizziness)

					•		-
	Mean + S	.D		SED			
Groups	0th Day	Im Immediately after Treatment	MD		t Value	p value	%
Group-A	2.50±0.86	2.03±0.67	0.47	0.104	4.4737	P= 0.0001	18.8
Group-B	2.60±1.04	1.63±0.67	0.97	0.140	6.9221	P<0.0001	37.3



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1	Mean + S	.D		SED			
	0th Day	Aft After follow up	MD		t Value	p value	%
Group-A	2.50±0.86	1.77±0.68	0.73	0.159	4.6256	P< 0.0001	29.2
Group-B	2.60±1.04	1.13±0.35	1.40	0.184	7.9694	P<0.0001	56.5

### **Effects on Klama (Fatigue):**

The impact of Virechana and Urovasti (Group A) on klama shows a very statistically significant effect (P = 0.0001) immediately after treatment completion and an extremely statistically significant effect (P < 0.0001) during follow-up. In contrast, the impact of Virechana, Urovasti, and Matra Vasti (Group B) on klama is statistically significant (P = 0.0008) immediately after treatment completion and extremely statistically significant (P < 0.0001) during follow-up compared to baseline. Group B exhibits a significantly higher impact compared to Group A.

Table no. 3: Showing PAIRED T- TEST summary of Klama (fatigue):

	Mean + S			SED			
Groups	0th Day	Im Immediately after Treatment	MD		t Value	p value	%
Group-A	3.17±0.87	2.77±0.73	0.40	0.091	4.3970	P=0.0001	10.4
Group-B	2.77±1.07	1.47±0.68	1.30	0.160	8.1199	P<0.0001	46.9

1	Mean + S	.D		SED			
Groups	0th Day	Aft After follow up	MD		t Value	p value	%
Group-A	3.17±0.87	2.63±0.85	0.53	0.142	3.7640	P = 0.0008	17
Group-B	2.77±1.07	$1.13\pm0.43$	1.63	0.195	8.3907	P<0.0001	59.2

#### **Conclusion:**

Upon correlating the cardinal signs and symptomatology of the disease with Ayurvedic principles, it becomes evident that there is a predominance of Vata, Pitta, and Kapha as anubandha doshas, accompanied by Rasa-Rakta dushti. Dhamani upalepa is prominently observed in Ucca Raktacapa, indicating its classification as a Tridosha vyadhi with Vata and Pitta predominance. The aim of this study was to compare the efficacy of Virechana karma with Trivrit churna followed by Urovasti (Ksirabala taila) with and without Matra Vasti in managing Ucca Raktacapa, particularly Stage I Essential Hypertension.

The observations and results were statistically analyzed, revealing an extremely significant p-value immediately after treatment and during follow-up in both Group A and Group B. Group B demonstrated a higher percentage of symptom improvement compared to Group A.

These findings suggest that the combination of Virechana Karma, Urovasti, and Matra Vasti holds promise as an effective therapeutic approach.

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