



**A CLINICAL STUDY OF BHALLATAKA TAILA IN THE MANAGEMENT OF
ATHEROSCLEROSIS (DHAMANI PRATICHA)**

Dr. Brij Raj Malav^{*1} and Dr. Omprakash Upadhyaya²

¹Associate Professor, Kriya Sharir Department, Government Ayurveda, Yoga and Naturopathy College, Kota, Rajasthan, India.

²Prof. & H.O.D., Moulik Siddhant and Samhita Department, National Institute of Ayurveda, Jaipur, India.

***Corresponding Author: Dr. Brij Raj Malav**

Associate Professor, Kriya Sharir Department, Government Ayurveda, Yoga and Naturopathy College, Kota, Rajasthan, India.

Article Received on 21/07/2022

Article Revised on 10/08/2022

Article Accepted on 31/08/2022

ABSTRACT

Dhamani praticha is pathological that can be correlated with the atherosclerosis as per the modern science; this condition may causes serious consequences including ischemic heart disease and stroke, etc. *Dhamanipraticha* is a chronic illness which sometimes requires early management to prevent serious complications since it can become cause of myocardial infarction and even death if remain untreated. The *Dhamani praticha* is considered as diseases of *Kapha dosha* therefore treatment regimen of *Kapha dosha* is suggested to combat against *Dhamani praticha*. Considering this fact and taking quote of ancient Ayurveda “*Samhita*” we performed a research study to confirm the role of *Bhallataka Taila* in the management of symptoms and pathological parameters of Atherosclerosis (*Dhamani praticha*). Study observed that *Bhallataka Taila* offers significant relief in disease parameters and suppress pathological progression of disease.

KEYWORDS: *Ayurveda, Bhallataka Taila, Kapha dosha, Dhamani praticha, Atherosclerosis.*

INTRODUCTION

Dhamanipraticha is diseases of *Kapha*, considered as one amongst the twenty *Nanatmaja Vikara* of *Kapha*. The *Vyana Vayu* affects *Raktavaha Srotas* in *Dhamanipraticha*. The *Kapha* affects *Meda dhatu* and metabolism at the level of adipose tissue is main phenomena associated with *Dhamanipraticha*. Excess of *Meda dhatu* get deposited in the *Raktavaha srotas* which further blocks flow of *Vyan vayu*, this results high blood pressure and other consequences.^[1-4]

Ayurveda described many preventing and therapeutic approaches for the management of *Dhamanipraticha* including *Snehan*, *Swedan* and *Vaman* as detoxification measure. Various diet and lifestyle regimens along with

herbs offering *Lekhana* properties can be advises for reducing fat. The drugs belong from *Hridya Mahakashaya* category can also be suggested for treating *Dhamanipraticha*.^[3-6] The *Samprapti* of disease involves various factors as mentioned follow and pathological events are depicted in **Figure 1**.

Pathological Factors of *Dhamanipraticha*:

- **Dosha:** *Kapha*
- **Dusya:** *Rasa and Rakta*
- **Agni:** *Rasa Dhatvagnimandya*
- **Srotasas:** *Rasavaha*
- **Srotodushti:** *Sanga, Vimarga gamana, Atipravritti*

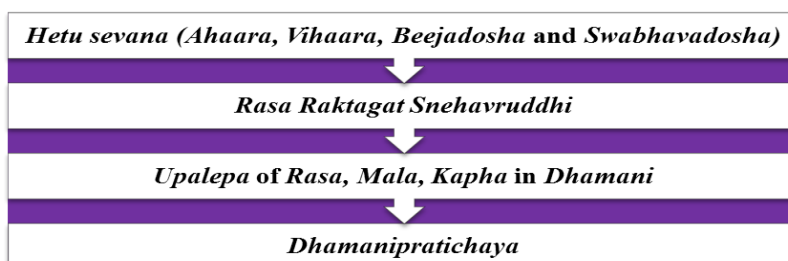


Figure 1: Pathological events associated with *Dhamanipraticha*.

As per modern science arteries are lined by endothelium and atherosclerosis occurs with the damage of this layer. The deposition of fat and fibrin within the arterial tissue leads hardening and thickening of arteries and causes damage of wall of arteries, this further leads high blood pressure and chances of stroke. There are three major events involves in the disease pathogenesis as per the modern science, these pathological events are as follows.

- Excessive lipid deposition
- Diminished lipid mobilization
- Diminished lipid utilization

Bhallataka (*Semecarpus anacardium*) is an Ayurvedic medicine belonging to family *Anacardiaceae* and commonly known as *Bhilawa*, *Biba* and marking nut, etc. It is used for piles, skin diseases and disease of *Kapha* vitiation, etc. *Bhallataka* used internally as well as externally, however *Shodhan sanskara* (purification procedure) of *Bhallataka* is recommended before its therapeutic uses. *Bhallataka* promotes *Agni*, *Bhallataka Taila* indicated for disorders such as *Medoroga*, *Meha*, *Krimi*, *Kustha* and *Arsha*, etc.^[7-11]

AIM AND OBJECTIVE

To establish scientific fact about the therapeutic role of *Bhallataka Taila* in *Dhamanipratichay*

MATERIALS AND METHODS

Study involves selection of patients from National Institute of Ayurveda, Seth Surajmal Bombaywala Ayurvedic Hospital and Satellite Hospital, Jawahar Nagar, Jaipur. Total 30 patients were selected on the basis of cardinal sign and symptoms of

Grading of intensity of disease's symptoms:

Low intensity of disease's symptoms	Medium intensity of disease's symptoms	High intensity of disease's symptoms	Highest intensity of disease's symptoms
+	++	+++	++++

Assessment of effect of therapy

Marked improvement	Moderate improvement	Less improvement	No improvement
Relief in symptoms $\geq 70\%$	Relief in symptoms from 30 to 70%	Relief in symptoms from 1 to 30%	No relief in disease parameters

RESULTS

Study observed 87.8% relief in *Agnimandya*, 82% relief in anorexia, 80% relief in *Jawara*, 71.43% relief in heart rate and 70.59% relief in heaviness of heart. This data confirmed beneficial effect of therapy in classical symptoms of *Dhamanipratichay*.

Study also observed 80.85 % relief in tiredness, 66.67 % relief in dyspnoea, 66.67 % relief in edema, 57.14 % relief in chest pain, 47.53% relief in obesity and 33.33 % relief in hypertension (**Figure 2**).

The effects of therapy on laboratory parameters were also found to be significant as mentioned in **Table 1**.

disease. All 30 patients were put in one (test) group to check effect of *Bhallataka Taila* in *Dhamanipratichay*.

Preparation of drug

Bhallataka Taila is termed as *Taila Patana*; the *Bhallataka* fruits were put in a vessel after cutting off the pseudocarp. The mouth of vessel wrapped with iron mesh and another small vessel was fitted upon this vessel. Wrapped with mud smeared cloth and then put in a pit, covered by cow-dung cakes and fire ignition was implemented. The oil from fruits was extracted and used to prepare capsule.

Study Protocol

The selected patients were given one S.A. capsule containing drug *Bhallataka Taila* twice daily after meal along with milk. The study conducted in winter season after the consideration of *Kaphaja Prakriti*.

Follow up period/duration of study

✓ 30 days

Assessment Parameters

A. Laboratory parameters

- ✚ Serum cholesterol level
- ✚ Serum triglyceride level
- ✚ H.D.L. level
- ✚ L.D.L. level
- ✚ V.L.D.L. level
- ✚ Blood pressure

B. Cardinal sign & symptoms

Assessment of therapy also done on the basis of reduction in sign & symptoms of disease.

This table suggested that *Bhallataka Taila* offers marked improvement in serum triglyceride level, moderate improvement in LDL, while less improvement was observed in B.P. Systolic, B.P. Diastolic, H.D.L and V.L.D.L. level.

Table 1: Effect of therapy on laboratory and clinical parameters of atherosclerosis.

S. No.	Investigations	t value	p value
1	B.P. Systolic	2.26	≥ 0.01
2	B.P. Diastolic	1.44	≥ 0.01
3	Serum cholesterol level	2.69	≥ 0.01
4	Serum triglyceride level	7.13	≤ 0.001
5	H.D.L.	1.44	≥ 0.01
6	L.D.L.	3.61	≤ 0.01
7	V.L.D.L.	2.69	≥ 0.01

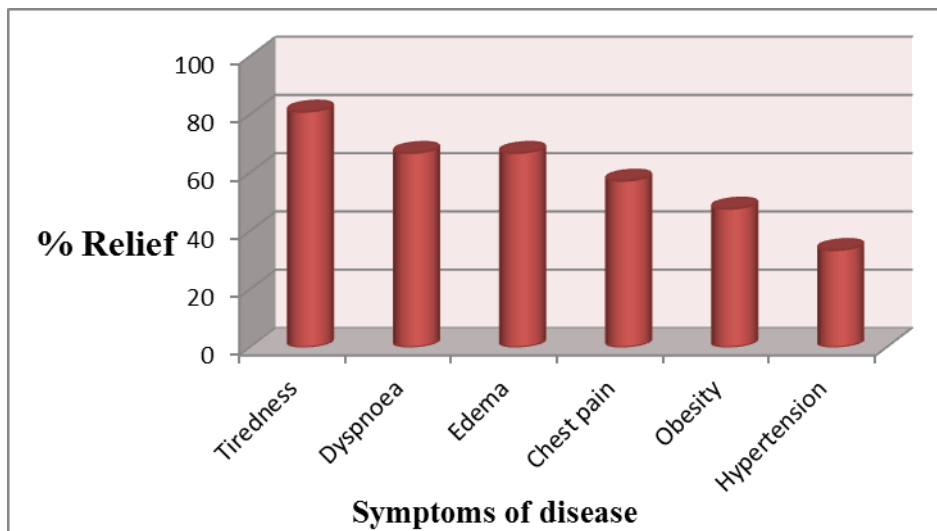


Figure 2: Effects of therapy in symptoms of atherosclerosis.

DISCUSSION

Bhallataka Taila destroys *Ama*, reduces *Meda*, control *Vata*, and imparts *Deepana-Pachana* properties thus suppress pathogenesis of *Dhamanipratichay*. The *Srotoshodhna*, *Lekhna* and *Kapha* pacifying, etc. effects of *Bhallataka Taila* offers therapeutic benefits in *Dhamanipratichay*.

The modern research also well evident that *Semecarpus anacardium* nut extract oil reduces serum cholesterol level, control body weight, reduces levels of fat and suppresses chances of fat deposition over arterial wall.

Bhallataka possess sharp nature thus imparts *Lekhna* property responsible for the reduction of fat. The hot potency, lightness and sharp properties of *Bhallataka* provided faster relief in *Dhamanipratichay*.

The Ayurveda property of *Bhallataka* fruit i.e.; *Katu*, *Kashaya Rasa*, *Laghu*, *Tikshna guna*, *Ushna virya* and *Madhura vipaka*, etc. helps to suppress pathogenesis of *Dhamanipratichay* associated with *Kapha* vitiation.^[11-13]

CONCUSSION

Dhamani pratichay is diseases of *Kapha dosha* therefore *Kapha* pacifying therapy was used against *Dhamani pratichay*. Study suggested that *Bhallataka Taila* can be used effectively for the management of symptoms and pathological consequences of Atherosclerosis (*Dhamani pratichay*). Study concluded that *Bhallataka Taila* offers significant relief in disease parameters and suppress

pathological progression of disease in selected patient. However study on large population for exploratory work is suggested to establish scientific fact about the role of *Bhallataka Taila* in the management of *Dhamani pratichay*.

REFERENCES

1. Pankaj Kothari et al.: Similarity Concept of Lipids & Meda Dhatu Vis-à-vis Hyperlipidemia, IAMJ, September 2015; 3(9).
2. Pankaj Kothari et al.: Similarity Concept of Lipids & Meda Dhatu Vis-à-vis Hyperlipidemia (Introduction), IAMJ, September 2015; 3(9).
3. Susruta Samhita with Nibandhasangraha Hindi Commentary of Shri Dalhanacharya edited by Vaidya Yadavji Trikamji (SharirSthan 4/12,13) published by Chowkhabha Krishnadas Academy, Varanasi, 2004.
4. Sarth Vagbhat, vaghbhat krut Ashtanghruday Edited by Dr.Ganesh Krushna Garde. Sutrasthan, 04/11. Pune: Anmol Prakashan, 2007; p. 15.
5. Sarth Vagbhat, vaghbhat krut Ashtanghruday Edited by Dr.Ganesh Krushna Garde. Sutrasthan, 04/15. Pune: Anmol Prakashan, 2007; p. 16.
6. Sarth Vagbhat, vaghbhat krut Ashtanghruday Edited by Dr.Ganesh Krushna Garde. Sutrasthan, 04/20. Pune: Anmol Prakashan, 2007; p. 16.
7. Yadavji Trikamji Acharya.: Charaka Samhita with Ayurveda Dipika commentary and Dridbala of Chakrapanidutt, Published by Chaukhamba Prakashan, Varanasi, Reprint edition, 2011; p. 382.

8. Yogi B.: Rasarnava, 12/21-22, edited by Tripathi I, Chaukhambha Sanskrit Series office, Varanasi, 4th ed, 2001; p.174.
9. Yadavji Trikamji, SushrutSamhita, in Chikitsasthan 17/41, Chaukhamba Orientalia Prakashan, Varanasi, Reprinted 4th edition, 1980; pp.469.
10. Mishra Brahmashankar, Bhawprakash Part I, Dhatwadi Varga/verce191,206, Reprint edition 2013, Chowkhamba Sanskrit Bhawan Varanasi, page 629, 634.
11. Sharma Anant ram, Sushrut Samhita of Sushruta, Chaukhamba surbharati prakashan, 1st edition 2013, Chikitsasthan 6/17, 9/7 pp.231,251; kalpasthan 1/69-71. pp513.
12. Tripathi Brahmanand, Ashtang Hridaya of Vagbhat, Choukhamba Sanskrit pratishthan Delhi, Reprint edition 2011; Chikitsasthan 1/154. pp.574. 11. Roy Rajiv kumar, Roy Ram kumar, Vangsen samhita of Vangsen, 1st edition, Prachya prakashan.
13. Yadavji Trikamji, SushrutSamhita, in Sutrasthanana46/196, Chaukhamba Orientalia Prakashan, Varanasi, Reprinted 4th edition, 1980; pp.229.