

## CLINICAL ASPECT OF LEKHANIYA MAHAKASHAYA

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## ABSTRACT

Now a days, with changing life styles, habitat and food habits causes many diseases; Sthaulya (Obesity) is one of them. Where there is excess amount of body fat in the body. Obesity has been linked to number of health risk, such as heart disease. therefore, there is a constant search for drug capable of correcting the lipid mechanism. As per Acharya charaka bulkiness of body due to extensive growth in abdominal region is called as sthula and state of sthula is sthoulya. Drug useful to treat sthoulya /hyper nutrition disease is grouped under the name 'Lekhaniya mahakashaya' by Acharya charaka in Ayurveda. These drugs acting as scraping agents. This is the huge range of scope of ayurvedic drug as compare to current modern medical science for lipid metabolism.

**KEYWORDS:** Obesity, Sthaulya, Lekhaniya Dravya, Medohara.

## INTRODUCTION

Lack of exercise and sedentary life styles causes most occurring diseases which is known as obesity. Which affect social, physical and psychological features. Obesity is receiving attention of large number of research studies. This overweight resulting in a well-defined symptom which are caused by fat loading in heart and other organ, therefore there is a constant search for drug capable of correcting the lipid mechanism.

As per Acharya charaka bulkiness of body due to extensive growth in abdominal region is called as sthula and state of sthula is sthoulya, which is result of abnormal excessive Medodhatu along with Kapha.<sup>[1]</sup>

Drug useful to treat sthoulya /hyper nutrition disease is grouped under the name 'Lekhaniya mahakashaya' by Acharya charaka in Ayurveda. These drugs acting as scraping agents which attribute that help removal of excess/ abnormal accumulation of Meda (fat) and kapha in normal way without inducing side effect or other diseases.<sup>[2]</sup>

This is the brighter side of ayurvedic drug as compare to existing modern medicine for lipid metabolism.<sup>[3]</sup>

**AIM:** To review the properties and action of 10 Lekhaniya mahākāṣāya on Sthaulya (obesity).

**ANALYSIS:** Analysis of the herbs clearly indicate that most of the drugs are having katu Tikta rasa, Laghu Ruksha Tikshna Guna.

“वातघ्नान्यान्यन्नपानानि श्लेष्ममेदोहराणि च। रुक्षोष्णा बस्तयस्तीक्ष्णा रुक्ष्याण्युद्वर्तनानि च॥”.. च.सू. २१/२१.

Drug of Lekhaniya mahakashaya possess mostly Laghu Ruksha Tikshna Guna with the help of which fulfils the required criteria of 'Sthoulya chikitsa'.<sup>[4]</sup>

Sthoulya is prominent disease caused by vitiated kapha. As per Acharya charaka to normalize vitiated kapha drug should be of Katu Tikta Kashaya rasa.

“तंकटुतिक्तकषायतीक्ष्णोष्णरुक्षैरुपक्रमैरुपक्रमेत स्वेदवमनशिरोविरेचनव्यायामादिभिः श्लेष्महरैर्मात्रां कालं च प्रमाणीकृत्य, वमनं तु सर्वोपक्रमेभ्यः श्लेष्मणि प्रधानतमं मन्यन्ते भिषजः, तद्ध्यादित एवामाशयमनुप्रविश्योरोगतं केवलं वैकारिकं श्लेष्ममूलमूर्ध्वमुत्क्षिपति, तत्रावजिते श्लेष्मण्यपि शरीरान्तर्गताः श्लेष्मविकाराः प्रशान्तिमापद्यन्ते । च.सू. २०/१९.

This observation will be helpful for the production of new formulation to treat Medodusti and its complication. Drugs that are katu tikta kashaya in rasa, possessing laghu, ruksha guna are largely responsible for medohara/ lekhaniya activities.<sup>[5]</sup>

## DRUG REVIEW

**1) Mustā (Cyperus rotundus Linn.)**

Mustā has Anti-obesity action,<sup>[6,7]</sup> lipolytic action,<sup>[8,9,10]</sup> Antioxidant Activity,<sup>[11]</sup> as per various researches. It

helps in stimulating lipolysis in adipocytes by activation of Beta adrenoceptors.

**2) Kuṣṭha (Saussurea lappa C.B. Clarke)**

Kuṣṭha has Anti-inflammatory,<sup>[12]</sup> and Anti-obesity,<sup>[13]</sup> activities as per researches available.

**3) Harīdrā (Curcuma longa Linn.)**

Harīdrā has Anti-Inflammatory,<sup>[14]</sup> Anti-obesity,<sup>[15]</sup> properties as per researches available. The active constituent curcumin helps in regulating adiposity energy metabolism.

**4) Dārūharīdrā (Berberis aristata Dc.)**

Berberis aristata reduced total cholesterol, triglycerides and low-density lipoprotein cholesterol and increased high-density lipoprotein cholesterol.<sup>[16]</sup>

**5) Vacā (Acorus calamus Linn.)**

Vacā has properties of Vasodilator Inhibition,<sup>[17]</sup> of Adipogenesis and Lipolysis,<sup>[18,19]</sup> Hypolipidemic Activity,<sup>[20]</sup> Neuro-protective,<sup>[21]</sup> The roots and rhizomes of Acorus calamus, family Araceae, are useful for weight loss and reducing LDL cholesterol and triglycerides.<sup>[22]</sup>

**6) Atiṣā (Aconitum heterophyllum Wall.)**

It inhibits HMG CoA reductase enzyme leading to a block in formation of cholesterol and also controls triglyceride level.<sup>[23]</sup>

**7) Kaṭurohiṇī – (Pichorrhiza kurroa Royle)**

It shows Hypolipidemic Activity.<sup>[24]</sup>

**8) Citraka (Plumbago zeylanica Linn.)**

It prevents the accumulation of triglycerides in liver and aorta and regressed atheromatous plaques in abdominal aorta. Its roots are used with honey in obesity.<sup>25</sup> the root bark of Plumbago zeylanica, family Plumbaginaceae, is used to treat obesity.<sup>[26,27]</sup>

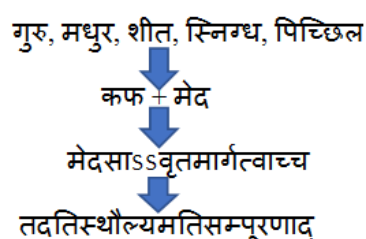
**9) Cirabilva (Holoptelea integrifolia Planch)**

The Holoptelea integrifolia treatment markedly lowered body weight, serum lipids and increase high-density lipoprotein-cholesterol.<sup>[28]</sup>

**10) Haimavati (Iris versicolor Linn)**

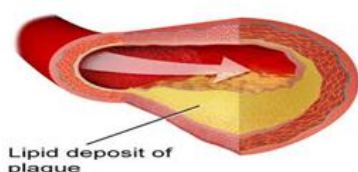
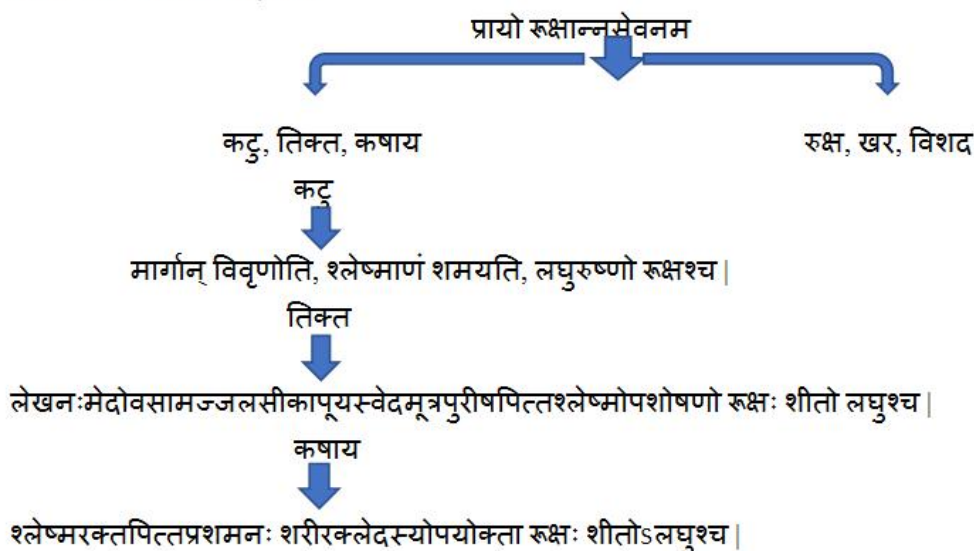
It enhances metabolism leading to greater consumption of fatty tissues of the body and identically used for obesity. It contains an acrid resin, an essential oil, starch, and tannin.<sup>[29]</sup>

**संप्राप्ती विघटन**



**संप्राप्ती विघटन:**

तदतिस्थौल्यमतिसम्पूरणाद्



## LEKHANIYA MAHAKASHAYA DRAVYA

“मुस्तकुष्ठहरिद्रादारुहरिद्रावचातिविषाकटूरोहिणीचित्रकचिरबिल्वहैमवत्यइति दशेमानि लेखनीयानि भवन्ति।”...च.सू.४/९.<sup>[30]</sup>



मुस्ता



कुष्ठ



हरिद्रा



दारुहरीद्रा



वचा



अतिविषा



कटूरोहिणी



चित्रक



चीरबील्व



हैमवति

The ingredients of Lekhaniya Mahākāṣāya are as below.<sup>[31]</sup>

S. N.	Drug name	Latin Name	Family	Part used
1	Mustā	Cyperus rotundus Linn.	Cyperaceae	Rhizome
2	Kuṣṭha	Saussurea lappa C.B. Clarke	Asteraceae	Root
3	Harīdrā	Curcuma longa Linn.	Zingiberaceae	Rhizomes
4	Dāruharīdrā	Berberis aristata Dc.	Berberidaceae	Stem, roots
5	Vacā	Acorus calamus Linn.	Araceae	Roots (Rhizome)
6	ativīṣā	Aconitum heterophyllum Wall	Ranunculaceae	Tuberous root
7	kaṭurohiṇī	Pichorrhiza kurroa Royle	Scropularaceae	Root
8	Citraka	Plumbago zeylanica Linn.	Plumbaginaceae	Root Bark
9	Cirabilva	Holoptelea integrifolia Planch	Ulmaceae	Bark of stem
10	Haimavati(śvetavacā)	Iris versicolor Linn	Iridaceae	Roots

The properties of all ingredients are as below.<sup>[31]</sup>

S. N.	Drug	Rasa	Virya	Vipaka	Guna	Doṣaghnatā
1	Mustā	Kaṭu, Tikta, Kaṣāya	Śīta	Kaṭu	Laghu, Rūkṣa	Kaphapit-taśāmaka
2	Kuṣṭha	Tikta, Kaṭu-Madhura	Uṣṇa	Kaṭu	Laghu, Tikṣṇa, Rūkṣa	kaphavātasa-maka
3	Harīdrā	Kaṭu Madhura	Anuṣṇa śīta,	Madhura	Laghu Snigdha Tikṣṇa	Vāta- Kaphaśāmaka,
4	Dāruharīdrā	Tikta, Kaṣāya	Uṣṇa	Kaṭu	Laghu, Rūkṣa	Kaphapit-taśāmaka, Chedana
5	Vacā	Kaṭu, Tikta	Uṣṇa	Kaṭu	Laghu, Tikṣṇa	Kaphavātasaśāmaka a Pittavardhaka
6	Ativīṣā	Kaṭu, Tikta	Uṣṇa,	Kaṭu	Laghu, Rūkṣa	Dīpana Pācana Śothahara Kaphavātasaśāmaka a
7	Kaṭurohiṇī	Kaṭu	Śīta	Kaṭu	Laghu, Rūkṣa	Kaphapit-taśāmaka, Bhedana
8	Citraka	Kaṭu	Uṣṇa	Kaṭu	Laghu, Rūkṣa, Tikṣṇa	Kaphavātasaśāmaka a Pittavardhaka
9	Cirabilva	Tikta Kaṣāya	Uṣṇa	Kaṭu	Laghu, Rūkṣa,	kaphavātahara Tridoṣahara
10	Haimavati	Kaṭu, Tikta	Uṣṇa	Kaṭu	Laghu, Tikṣṇa	Kaphavātasaśāmaka a

## DISCUSSION

Katurasa, tiktatara (Rasa) laghuguna, (Guna) are the properties common to all in above men- tioned drugs.

Review of the Lekhaniya dravyas also clearly shows that the alkaloids, glycosides, resins, tannins and volatile oils are the main types of constituents present in them. These

three rasas provide katupaka which is also named as Laghuvipaka. Drugs with predominance of laghu guna provide on administration katupaka or laghuvipaka, resulting in creation of identical condition in the system also there by reducing sthoulya (corpulency). The two properties i.e., laghuguna and rukshaguna are helpful to attenuate or to cure kaphaja diseases. Ushna virya is also helpful in the removal of fat. This predominance of katurasa, tiktarasa, kashaya rasa laghuguna, rukshaguna is responsible for the activity of Making a Lekhaniya dravya.

## CONCLUSION

The consideration of the Lekhaniya Dravya in the above light indicates that, in our ancient system of medicine a correlation par excellence had been developed between the properties of the drug and active constituents and restoration equilibrium in Tridosha in human system.

## REFERENCES

1. Caraka Samhitā - 'Āyurveda Dipikā' Commentary of Cakrapānidatta, edited by Vaidya yadavaji Trikamji, Chaukhambha Surbharti Prakashan, Varanasi, Edition reprint, 2011; 21/9: 117.
2. Ancient Science of Life, Vol No. III No. 3 January, Pages 132 - 135 Pharmac - Therapeutics Of Dasemani Drugs N. N. Sircar 13/4, Central Park, Calcutta - 700 032, India, 1984.
3. A study of effect of lekhanika mahakashaya on lipid profile kumar naresh/ IJRAP, NovDec 2012; 3(6).
4. Caraka Samhitā - 'Āyurveda Dipikā' Commentary of Cakrapānidatta, edited by Dr. Lakshmidhar dwivedi, Chaukhambha krishnadas academy, Varanasi; Ca. Su. 21/20: 405.
4. Caraka Samhitā - 'Āyurveda Dipikā' Commentary of Cakrapānidatta, edited by Dr. Lakshmidhar dwivedi, Chaukhambha krishnadas academy, Varanasi; Ca. Su. 20/19: 399.
5. Athes K, Divakar M, Brindha P, Anti-Obesity Potential Of Cyperus Rotundus L. Aqueous Tuber Extract In Rats Fed On High Fat Cafeteria Diet, Asian J Pharm Clin Res., 2014; 7(2): 88-92.
6. Chandratre RS, Chandarana S, Mengi SA. Lipid lowering activity of alcoholic extract of Cyperus rotundus. Int J Res Pharm Chem, 2011; 1: 10425.
7. Bambhole V D, Effect of some medicinal plant preparation on adipose tissue metabolism, Ancient Sci Life, 1988; 8: 117-124.
8. Lemaure B, Touché A, Zbinden I, Moulin J, Courtois D, Mace K and Darimont C, Administration of Cyperus rotundus tubers extract prevents weight gain in obese Zucker rats, Phytother Res., 2007; 21(8): 724-730.
9. Karnick C R, Clinical evaluation of Cyperus rotundus Linn. (Motha) on obesity: A randomized double-blind placebo-controlled trial on Indian patients, Indian Med., 1992; 4(2): 7-10.
10. Nagulendran, K.R., Velavan, S., Mahesh, R. & Begum, H., 'In Vitro Antioxidant Activity and Total Polyphenolic Content of Cyperus rotundus Rhizomes', E-Journal of Chemistry, hepatoprotective effects: A prevention study Journal of Ethnopharmacology Volume 105, Issue 3 24 May 2006; 380-386.
11. Madan Mohan Pandey et al; Saussurea costus: Botanical, chemical and pharmacological review of an ayurvedic medicinal plant Journal of Ethnopharmacology, 2007; 110: 379-390.
12. Yoon T.S., Center of Herbal Resources Research, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea et al. Anti-obesity Activity of Extract from Saussurea lappa, 2010.
13. Safety and Anti-Inflammatory Activity of Curcumin: A Component of Tumeric (Curcuma longa) Nita Chainani-Wu. The Journal of Alternative and Complementary Medicine, July 2004; 9(1): 161-168. <https://doi.org/10.1089/107555303321223035> Published in, 2004; 9(1).
14. Ji Hye Kim, Ok-Kyung Kim, Ho-Geun Yoon, Jeongjin Park, Yanghee You, Kyungmi Kim Anti-obesity effect of extract from fermented Curcuma longa L. through regulation of adipogenesis and lipolysis pathway in high-fat diet-induced obese rats, Article: 30428 /27, Jan 2016. <https://doi.org/10.3402/fnr.v60.30428>.
15. Giuseppe Derosa et al Berberis aristata/Silybum marianum fixed combination on lipid profile and insulin secretion in dyslipidemic patients.
16. Shah et al. Journal of Cardiovascular Pharmacology, July 2009; 54(1): 38-46.
17. Lee SH et al. Cell Mol Biol Jan 24, 56 Suppl.OL121522, Department of Biological Science, Sookmyung Women's University, Seoul, 2010; 140-742.
18. Meng-Hwan Lee et al. Food Chemistry, 1 May 2011; 126(1): 1-7.
19. Reshma S. Parab et al. (Flitopteria, October 2002; 73(6): 451-455.
20. Deepak Ganjewala et al. Asian Journal of Plant Sciences, 2011; 10(3): 182-189.
21. Parab RS, Mengi SA. Hypolipidemic activity of Acorus calamus L. in rats. Fitoterapia, 2002; 73: 451-455.
22. Arun Koorappally Subash and Anu Augustine, Hypolipidemic effect of methanol fraction of Aconitum heterophyllum wall ex Royle and the mechanism of action in diet-induced obese rats; J Adv Pharm Technol Res., 2012 Oct-Dec; 3(4): 224-228.
23. Hyeung Sik Lee Hyo Chan Ahn Sae Kwang Ku Hypolipemic effect of water extracts of Picrorrhiza rhizome PX-407 induced hyperlipemic ICR mouse model with hepatoprotective effects: A prevention study Journal of Ethnopharmacology, 2006; 105(3): 380-386.
24. Sudha R Pendurkar Antihyperlipidemic effect of aqueous extract of Plumbago zeylanica roots in diet-



- induced hyperlipidemic rat *Pharmaceutical Biology*, 2009; 47(10).
25. Dwivedi S. Effect of *Plumbago zeylanica* in hyperlipidemic rabbits and its modification by vitamin E. *Indian J Pharmacol*, 1997; 29: 138.
  26. Chetty KM, Sivaji K, Sudarsanam G, Sekar PH. *Pharmaceutical Studies and Therapeutic Uses of Plumbago zeylanica L. Roots* (Chitraka, Chitramulam). *Ethnobotanical Leaflets*, 2006; 10: 294-304.
  27. Subash AK, Augustine A; Hypolipidaemic effects of methanol extract of *Holoptelea integrifolia* (Roxb.) Planchon bark in diet-induced obese rats. *Applied Biochemistry and Biotechnology*, 2013 Jan; 169(2): 546-53. doi: 10.1007/s12010-012-9993-0. Epub, 2012 Dec 14.
  28. V.D. Bimbhole and P.L. Kamalakar *Ancient Science of Life*, 1993 Jul-Dec; 13(1-2): 89–96.
  29. *Caraka Samhitā - 'Āyurveda Dipikā'* Commentary of Cakrapāṇidatta, edited by Dr. Lakshmidhar dwivedi, Chaukhambha krishnadas academy, Varanasi; Ca. Su. 4/9: 114.
  30. Dr.J.L.N.Shastry *Dravyaguna Vigyan vol. II* Chaukhambha Orientalia Varanasi reprint, 2003.