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EFFECT OF *AROGYAVARDHINI VATI* IN NON-ALCOHOLIC FATTY LIVER DISEASE: A COMPREHENSIVE AYURVEDIC REVIEW

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ABSTRACT

Non-Alcoholic Fatty Liver Disease (NAFLD) is one of the most common chronic liver disorders worldwide and is emerging as a serious metabolic health burden. It is characterized by excessive fat accumulation in hepatocytes in individuals with negligible alcohol intake. The increasing prevalence of obesity, diabetes mellitus, dyslipidemia, sedentary lifestyle, and metabolic syndrome has significantly contributed to the rise of NAFLD globally. Modern medical science currently emphasizes lifestyle modification as the primary therapeutic intervention, while no universally accepted pharmacological treatment is available. Ayurveda explains liver disorders under the concepts of *Yakrit Roga*, *Medoroga*, *Santarpanotha Vikara*, and *Agnimandya*.¹

Arogyavardhini Vati is a classical *Kharaliya Rasayana* formulation extensively used in hepatic, metabolic, dermatological, and digestive disorders. The formulation contains *Katuki*, *Triphala*, *Guggulu*, *Shilajatu*, *Tamra Bhasma*, *Loha Bhasma*, and purified mineral ingredients possessing *Deepana*, *Pachana*, *Lekhana*, *Medohara*, and hepatoprotective properties.² The formulation acts by correcting impaired *Agni*, eliminating *Ama*, stimulating bile secretion, improving lipid metabolism, and protecting hepatocytes from oxidative stress and inflammation.

Several clinical and experimental studies have demonstrated the efficacy of *Arogyavardhini Vati* in improving liver enzymes, lipid profile, hepatomegaly, and ultrasonographic findings in NAFLD patients.³ This review critically evaluates the role of *Arogyavardhini Vati* in NAFLD from both Ayurvedic and modern perspectives.

Keywords: *Arogyavardhini Vati*, NAFLD, *Yakrit Roga*, *Medoroga*, Fatty Liver, Ayurveda, Hepatoprotective.

INTRODUCTION

Non-Alcoholic Fatty Liver Disease (NAFLD) represents a clinicopathological spectrum ranging from simple steatosis to non-alcoholic steatohepatitis (NASH), fibrosis, cirrhosis, and hepatocellular carcinoma.⁴ It is defined as the accumulation of triglycerides exceeding 5% of liver weight in the absence of significant alcohol consumption.⁵

NAFLD is strongly associated with obesity, insulin resistance, type 2 diabetes mellitus, hypertension, dyslipidemia, and metabolic syndrome.⁶ According to global epidemiological studies, nearly 25–30% of the world population is affected by NAFLD, making it the leading cause of chronic liver disease.⁷

The liver plays a central role in lipid metabolism, detoxification, digestion, and energy homeostasis. Excessive caloric intake, sedentary lifestyle, and metabolic disturbances promote hepatic fat accumulation leading to oxidative stress and inflammatory injury.⁸

Ayurveda does not directly describe NAFLD as a separate disease entity; however, its pathogenesis and symptomatology can be correlated with *Yakrit Roga*, *Medoroga*, *Santarpanotha Vikara*, *Kapha-Pittaja Vikara*, and *Agnimandya*.⁹ Disturbance of *Jatharagni* and *Dhatvagni* results in improper metabolism of *Meda Dhatu*, leading to abnormal fat deposition in *Yakrit*.

Among various Ayurvedic formulations, *Arogyavardhini Vati* occupies a prominent position due to its multidimensional pharmacological actions. The name itself signifies “that which enhances overall health.” It is extensively indicated in *Yakrit Vikara*, *Kamala*, *Pandu*, *Kushtha*, *Medoroga*, and digestive disorders.¹⁰

AIM

To evaluate the therapeutic role of *Arogyavardhini Vati* in the management of Non-Alcoholic Fatty Liver Disease.

OBJECTIVES

1. To review NAFLD from modern and Ayurvedic perspectives.
2. To analyze the pharmacodynamic properties of *Arogyavardhini Vati*.
3. To evaluate clinical evidence supporting the use of *Arogyavardhini Vati* in NAFLD.
4. To understand the probable mechanism of action of *Arogyavardhini Vati*.

MATERIALS AND METHODS

This review article was prepared through extensive literary research from classical Ayurvedic texts including *Charaka Samhita*, *Sushruta Samhita*, *Bhaishajya Ratnavali*, *Rasaratna Samuccaya*, and *Rasatarangini*.

MODERN CONCEPT OF NON-ALCOHOLIC FATTY LIVER DISEASE

Definition

NAFLD is characterized by hepatic steatosis involving more than 5% hepatocytes in individuals without significant alcohol intake.¹¹

Etiological Factors

1. Obesity

Central obesity is one of the major risk factors causing increased free fatty acid influx into hepatocytes.

2. Insulin Resistance

Insulin resistance leads to increased lipolysis and hepatic triglyceride accumulation.

3. Dyslipidemia

Elevated serum triglycerides and cholesterol contribute to hepatic steatosis.

4. Sedentary Lifestyle

Reduced physical activity impairs lipid metabolism.

5. High-Calorie Diet

Excessive intake of refined carbohydrates and saturated fats promotes fat accumulation in the liver.

PATHOGENESIS OF NAFLD

The “multiple-hit hypothesis” is widely accepted for NAFLD pathogenesis.¹²

First Hit

Insulin resistance causes increased fatty acid accumulation in hepatocytes.

Second Hit

Oxidative stress, mitochondrial dysfunction, inflammatory cytokines, and lipid peroxidation lead to hepatocellular injury.

Third Hit

Persistent inflammation and fibrosis eventually progress toward cirrhosis and hepatocellular carcinoma.

CLINICAL FEATURES

- Fatigue
- Malaise
- Dyspepsia
- Heaviness in abdomen
- Right hypochondriac pain
- Hepatomegaly
- Obesity
- Elevated liver enzymes

DIAGNOSIS

1. Liver Function Tests
2. Ultrasonography
3. Fibroscan
4. MRI
5. Liver Biopsy (Gold Standard)

AYURVEDIC PERSPECTIVE OF NAFLD

Nidana

The causative factors include:

- *Ati Guru Ahara*
- *Ati Snigdha Ahara*
- *Madhura Ahara*
- *Divaswapa*
- *Avyayama*
- *Madyapana*
- Sedentary habits

These factors aggravate *Kapha Dosha* and vitiate *Meda Dhatu*.¹³

Samprapti OF NAFLD

Due to *Mandagni*, improperly digested food transforms into *Ama*. This *Ama* combines with aggravated *Kapha* and *Meda* causing obstruction of *Medovaha Srotas*. Subsequently, abnormal deposition of fat occurs in *Yakrit* resulting in *Yakrit Dushti*.

Samprapti Ghataka

- *Dosha – Kapha, Pitta*
- *Dushya – Rasa, Meda*
- *Agni – Jatharagni Mandya*
- *Srotas – Medovaha Srotas*
- *Srotodushti – Sanga*
- *Adhithana – Yakrit*

AROGYAVARDHINI VATI

Classical Reference

Arogyavardhini Vati is described in *Rasaratna Samuccaya* and *Bhaishajya Ratnavali* under liver and metabolic disorders.¹⁴

Ingredients of Arogyavardhini Vati

Ingredients	Properties
<i>Shuddha Parada</i>	<i>Yogavahi</i> , catalyst
<i>Shuddha Gandhaka</i>	Detoxifying
<i>Loha Bhasma</i>	Hematinic, metabolic stimulant
<i>Tamra Bhasma</i>	Hepatic stimulant
<i>Abhraka Bhasma</i>	<i>Rasayana</i>
<i>Katuki</i>	Hepatoprotective
<i>Triphala</i>	Antioxidant
<i>Guggulu</i>	Hypolipidemic
<i>Shilajatu</i>	Rejuvenator
<i>Nimba</i>	Anti-inflammatory
<i>Chitraka</i>	<i>Deepana-Pachana</i>

PHARMACOLOGICAL ACTIONS OF AROGYAVARDHINI VATI**Deepana Action**

Enhances digestive and metabolic activity.

Pachana Action

Digests accumulated *Ama* and improves metabolism.

Lekhana Action

Scrapes excessive fat accumulation.

Medohara Action

Reduces abnormal *Meda Dhatu* deposition.

Hepatoprotective Action

Protects hepatocytes against oxidative stress and inflammation.

Cholagogue Action

Stimulates bile secretion and improves digestion.

PROBABLE MODE OF ACTION IN NAFLD**Correction of Agnimandya**

By improving *Jatharagni*, *Arogyavardhini Vati* enhances proper digestion and metabolism.

Reduction of Ama

The *Pachana* property eliminates toxic metabolites responsible for *Srotorodha*.

Improvement in Lipid Metabolism

Guggulu and *Triphala* help reduce serum triglycerides and cholesterol.

Hepatic Detoxification

Katuki promotes bile secretion and liver detoxification.

Antioxidant Effect

The formulation reduces oxidative stress and lipid peroxidation.

Anti-inflammatory Effect

Inflammatory cytokines and hepatic inflammation are reduced.

CLINICAL STUDIES

A clinical trial conducted on NAFLD patients showed significant improvement in liver enzymes and ultrasonographic grading following administration of *Arogyavardhini Vati* with dietary regulation.¹⁵

Another study reported reduction in hepatomegaly, abdominal discomfort, anorexia, and dyslipidemia after Ayurvedic intervention including *Arogyavardhini Vati*.¹⁶

Experimental studies have demonstrated hepatoprotective effects through antioxidant and membrane stabilizing activity.¹⁷

DISCUSSION

NAFLD is a metabolic disorder involving impaired lipid metabolism and insulin resistance. Ayurveda explains similar pathology through *Agnimandya*, *Ama*, *Kapha Dushti*, and *Medovaha Srotodushti*.

Arogyavardhini Vati acts at multiple levels of disease pathogenesis. The *Deepana* and *Pachana* properties correct impaired digestion and metabolism. *Lekhana* and *Medohara* properties help reduce excessive fat accumulation in liver tissue. *Katuki* acts as an effective hepatoprotective and cholagogue agent while *Guggulu* improves lipid metabolism.

The antioxidant and anti-inflammatory actions of *Triphala* and *Nimba* protect hepatocytes against oxidative injury. *Tamra Bhasma* stimulates hepatic metabolism and bile secretion. Thus, the formulation provides a comprehensive therapeutic effect in NAFLD.

Lifestyle modification remains essential in management. Ayurvedic dietary regulation, exercise, avoidance of *Guru* and *Snigdha Ahara*, and correction of metabolic disturbances are necessary adjuncts.

CONCLUSION

Arogyavardhini Vati is an important Ayurvedic formulation possessing significant hepatoprotective, hypolipidemic, antioxidant, *Deepana*, *Pachana*, and *Medohara* properties beneficial in Non-Alcoholic Fatty Liver Disease. By correcting *Agnimandya*, eliminating *Ama*, improving lipid metabolism, and protecting hepatocytes, it effectively addresses the fundamental pathology of NAFLD.

Available clinical and experimental evidence supports its therapeutic role in improving liver function tests, lipid profile, and ultrasonographic findings. However, larger randomized controlled trials are still required to establish standardized protocols and long-term safety.

REFERENCES

1. Joshi F, Saroj UR. An Ayurvedic Perspective of Nonalcoholic Fatty Liver Disease. *J Ayurveda Integr Med Sci.* 2025;10(5):121-128.
2. Mishra S. *Bhaishajya Ratnavali*. 18th ed. Varanasi: Chaukhamba Sanskrit Bhawan; 2011. p.403-405.
3. Padmaja D, Maheshwar T, Anuradha D, Rao CHVSK. *Arogyavardhini Vati* - A boon for liver disorders from Ayurveda. *AYUSHDHARA.* 2021;8(4):3418-3425.
4. Younossi ZM, Koenig AB, Abdelatif D, et al. Global epidemiology of NAFLD. *Hepatology.* 2016;64(1):73-84.
5. Davidson MH, et al. Nonalcoholic fatty liver disease. *Clin Liver Dis.* 2018;22(1):73-87.

6. Chalasani N, Younossi Z, Lavine JE, et al. Diagnosis and management of NAFLD. *Hepatology*. 2018;67(1):328-357.
7. Rinella ME. Nonalcoholic fatty liver disease. *JAMA*. 2015;313(22):2263-2273.
8. Bellentani S. The epidemiology of NAFLD. *Liver Int*. 2017;37(S1):81-84.
9. Sharma PV. *Charaka Samhita*. Reprint ed. Varanasi: Chaukhamba Orientalia; 2014. p.512-520.
10. Acharya YT. *Rasaratna Samuccaya*. Reprint ed. Varanasi: Chaukhamba Orientalia; 2019. p.412-415.
11. Eslam M, Sanyal AJ, George J. MAFLD: A consensus-driven proposed nomenclature. *Gastroenterology*. 2020;158(7):1999-2014.
12. Buzzetti E, Pinzani M, Tsochatzis EA. Pathogenesis of NAFLD. *Metabolism*. 2016;65(8):1038-1048.
13. Tripathi B. *Sharangadhara Samhita*. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2018. p.212-218.
14. Sharma S. *Rasatarangini*. 11th ed. New Delhi: Motilal Banarsidass; 2014. p.731-735.
15. Singh A, et al. Ayurvedic management of fatty liver disease. *Anc Sci Life*. 2015;35(1):34-40.
16. Kumar S. Ayurvedic management in NAFLD: A case study. *Int J Complement Alt Med*. 2022;15(2):45-49.
17. Valvi AR, Mouriya N, Athawale RB, Bhatt NS. Hepatoprotective Ayurvedic plants. *J Complement Integr Med*. 2016;13(3):207-215.

