ISSN: 2322 - 0902 (P)
ISSN: 2322 - 0910 (O)

International Journal of Ayurveda and Pharma Research

Review Article

THE THERAPEUTIC POTENTIAL OF *LASHUNA* (*ALLIUM SATIVUM*) IN GYNECOLOGICAL DISORDERS: AN INTEGRATIVE REVIEW

Divya Rani.S.R

Associate Professor and Head, Dept of Prasutitantra & Striroga, Sree Narayana Institute of Ayurveda Studies & Research, Kollam, Kerala, India.

Article info

Article History:
Received: 21-01-2025
Accepted: 18-02-2025
Published: 07-03-2025

KEYWORDS:
Lashuna, Allium sativum, Ayurveda, Gynecological disorders, Premenstrual syndrome, Polycystic ovary syndrome, Vaginal infections, Menopause.

ABSTRACT

Lashuna (*Allium sativum*), commonly known as garlic, holds a significant place in Ayurvedic medicine for its diverse therapeutic properties. This review aims to integrate classical Ayurvedic references with contemporary scientific research to evaluate the efficacy of *Lashuna* in managing gynecological disorders, including premenstrual syndrome (PMS), polycystic ovary syndrome (PCOS), vaginal infections, and menopausal symptoms. Ayurvedic texts such as the *Charaka Samhita* and *Sushruta Samhita* describe *Lashuna* as a potent *Rasayana* with *Vata-Kapha* pacifying, digestive stimulant, and antimicrobial properties, making it beneficial for reproductive health. Modern studies corroborate these claims, demonstrating garlic's antimicrobial, anti-inflammatory, and hormonal regulatory effects. Clinical trials have reported significant reductions in PMS symptoms and improvements in insulin resistance among PCOS patients following garlic supplementation. Additionally, garlic exhibits antimicrobial activity against pathogens responsible for vaginal infections and may offer cardiovascular and antioxidant benefits pertinent to menopausal women. While these findings are promising, further rigorous clinical trials are necessary to establish standardized guidelines for *Lashuna*'s therapeutic application in gynecological health.

INTRODUCTION

Lashuna (*Allium sativum*), or garlic, has been esteemed in Ayurvedic medicine for its extensive therapeutic applications. Classical texts, including the Charaka Samhita and Sushruta Samhita, attribute multiple health benefits to *Lashuna*[1], particularly in the realm of women's health. This review seeks to bridge traditional Ayurvedic insights with contemporary scientific research to assess the role of *Lashuna* in managing various gynecological disorders.

Ayurvedic Perspective on *Lashuna*: In Ayurveda, *Lashuna* is classified as a *Rasayana*, known for its rejuvenating properties. It is described as *Vata-Kapha hara* (pacifying *Vata* and *Kapha doshas*), *Agnideepana* (digestive stimulant), and *Krimighna* (antimicrobial).

Access this article online

Quick Response Code

https://doi.org/10.47070/ijapr.v13i2.3569

These attributes render it effective in addressing reproductive system disorders such as *Yonivyapad* (vaginal disorders), *Artava Dushti (*menstrual irregularities), and infertility. The Charaka Samhita Sutrasthana (Chapter 25) specifically highlights *Lashuna*'s capacity to restore strength and vitality, essential components of female reproductive health. In Charaka Samhita and Susruta Samhita, *Lasuna* is mainly advocated in *Vataja* disorders[2]. *Acharya Kashyapa* depicted its numerous other restorative impacts in a separate chapter called "*Lasunakalpa adhyaya*" [3].

Modern Scientific Insights

Premenstrual Syndrome (PMS): A randomized double-blind placebo-controlled trial investigated the impact of garlic supplementation on premenstrual disorders. The study found that after three consecutive menstrual cycles, participants who received garlic supplements experienced a significant reduction in the severity of premenstrual symptoms compared to the placebo group. These findings suggest that garlic may serve as a potential alternative therapy for managing premenstrual disorders[4].

Polycystic Ovary Syndrome (PCOS): A randomized controlled trial investigated the effects of garlic on women with PCOS[5], revealing that garlic supplementation significantly improved fasting plasma glucose levels and insulin resistance [6]. These findings suggest that garlic could serve as a promising adjunct therapy alongside conventional treatments to mitigate complications [7] associated with PCOS [8].

Research has explored the immunomodulatory effects of specific garlic fractions on PCOS. One study demonstrated that the R10 fraction of garlic alleviated PCOS symptoms, highlighting its potential as a complementary therapy for this condition [9].

Vaginal Infections: The antimicrobial properties of garlic have been evaluated concerning vaginal health. A study investigated whether oral garlic consumption could reduce vaginal *Candida* colony counts during the luteal phase of the menstrual cycle in asymptomatic women. While the study provided insights into garlic's potential antifungal effects, further research is necessary to establish definitive conclusions[10]. However, clinical evidence supporting the efficacy of oral garlic supplementation in reducing vaginal *Candida* colonization is limited. A randomized double-blind controlled trial conducted in Melbourne, Australia, aimed to determine whether oral garlic could reduce vaginal *Candida* counts during the luteal phase of the menstrual cycle in asymptomatic women colonized with *Candida* species. The study concluded that oral garlic did not significantly decrease vaginal *Candida* colony counts compared to the placebo group.

Regarding bacterial vaginosis (BV), some clinical evidence suggests that vaginal creams containing garlic may be effective in improving symptoms and complications associated with mixed BV infections [11].

Pelvic Inflammatory diseases (PID): Inflammation is a key component of PID. Garlic's anti-inflammatory properties may aid in reducing inflammation within the pelvic region, potentially alleviating some symptoms associated with PID. Direct clinical studies evaluating garlic's efficacy specifically for PID are limited. However, its general antimicrobial and anti-inflammatory effects have been documented. For instance, garlic extract has been shown to reduce pelvic and back pain, dysmenorrhea, and dyspareunia in individuals with endometriosis, a condition with symptoms overlapping those of PID. [12]

Menopausal Health: Menopause is associated with an increased risk of cardiovascular diseases due to declining estrogen levels. Research indicates that garlic supplementation can positively influence cardio-vascular risk factors in postmenopausal women[13]. A study involving the intake of aged garlic extract demonstrated reductions in total cholesterol [14], low-density lipoprotein (LDL) cholesterol[15], and homocysteine levels, all of which are linked to cardiovascular health.[16,17]

The decrease in estrogen during menopause is associated with increased oxidative stress, contributing to various health issues. A pilot study evaluated the efficacy of *Lashuna* capsules in alleviating psychological symptoms during the menopausal transition. Women administered 500mg of aqueous garlic extract daily for thirty days reported significant improvements in psychological well-being[18]. A study involving postmenopausal women who consumed garlic supplements showed a significant reduction in oxidative stress markers and an enhancement in antioxidant enzyme activities. This suggests that garlic may help mitigate oxidative stress in menopausal women [19].

Bone density reduction is a common concern during menopause[20]. Some studies have explored the effects of garlic on bone health in postmenopausal women, with findings suggesting potential benefits. However, more extensive research is needed to draw definitive conclusions.

CONCLUSION

The integration of Ayurvedic wisdom and modern scientific research highlights the therapeutic potential of *Lashuna* (*Allium sativum*) in managing various gynecological disorders. Its multifaceted actions, including antimicrobial, anti-inflammatory, and hormonal regulatory effects, make it a promising adjunct in treating conditions such as PMS, PCOS, vaginal infections, and menopausal symptoms. Despite encouraging findings, further rigorous clinical trials are essential to establish standardized guidelines for the effective and safe application of *Lashuna* in women's health.

REFERENCES

1. Kashinath shastri, Caraka samhita, Edited by Gangasahaya Pandeya, Chaukambha Sanskrit Sansthan, Part - 1 Sutrasthana 27th chapter.
2. Kashinath Shastri, Caraka Samhita, edited by Gangasahaya Pandey, Chaukambha Sanskrit Sansthan, Sutrasthana 27th chapter, Susruta Samhita, Chaukambha Viswabharati Varanasi, Sutrasthana chapter 46.
3. P.V.Tewari, Kashyapa Samhita, edited by P.V. Tewari, translation and commentary by P.V. Tewari Chaukhambha Viswabharati oriental publishers Varanasi, Kalpasthana chapter-2, Pp. 326-342
4. Jafari F, Tabarrai M, Abbassian A, Jafari F, Ayati MH. Effect of Garlic (Allium sativum) supplementation on premenstrual disorders: a randomized, double-blind, placebo-controlled trial. Evid Based Complement Alternat Med. 2021; 2021: 9965064. doi:10.1155/2021/9965064.

5. March WA, Moore VM, Willson KJ, Phillips DI, Norman RJ, Davies MJ. The prevalence of polycystic ovary syndrome in a community sample assessed under contrasting diagnostic criteria. Hum Reprod. 2010 Feb; 25(2): 544-551. doi: 10.1093/humrep/dep399.
6. Zadhoush R, Alavi-Naeini A, Feizi A, Naghshineh E, Ghazvini MR. The effect of garlic (Allium sativum) supplementation on the lipid parameters and blood pressure levels in women with polycystic ovary syndrome: A randomized controlled trial. Phytother Res. 2021 Nov; 35(11): 6335-6342. doi: 10.1002/ptr.7282.
7. Dumesic DA, Oberfield SE, Stener-Victorin E, Marshall JC, Laven JS, Legro RS. Scientific statement on the diagnostic criteria, epidemiology, pathophysiology, and molecular genetics of polycystic ovary syndrome. Endocr Rev. 2015 Oct; 36(5): 487-525. doi: 10.1210/er.2015-1018.
8. Zadhoush R, Alavi-Naeini A, Feizi A, Naghshineh E, Ghazvini MR. The effect of garlic (Allium sativum) supplementation on the lipid parameters and blood pressure levels in women with polycystic ovary syndrome: A randomized controlled trial. Phytother Res. 2021 Nov; 35(11): 6335-6342. doi: 10.1002/ptr.7282.
9. Falahatian S, Haddad R, Pakravan N. Modulatory effects of R10 fraction of garlic (Allium sativum L.) on hormonal levels, T cell polarization, and fertility-related genes in mice model of polycystic ovarian syndrome. J Ovarian Res. 2022; 15(1): 4. doi:10.1186/s13048-021-00926-6.
10. Watson CJ, Grando D, Fairley CK, Chondros P, Garland SM, Myers SP, Pirotta M. The effects of oral garlic on vaginal candida colony counts: a randomised placebo controlled double-blind trial. BJOG. 2014 Mar; 121(4): 498-506. doi:10.1111/1471-0528.12518.
11. Mohammadzadeh F, Dolatian M, Jorjani M, Alavi Majd H, Borumandnia N. Comparing the therapeutic effects of garlic tablet and oral metronidazole on bacterial vaginosis: a randomized controlled clinical trial. Iran Red Crescent Med J. 2014; 16(7): e19118. doi:10.5812/ ircmj.19118.
12. Amirsalari S, Behboodi Moghadam Z, Taghizadeh Z, Jafar Abadi MN, Sabaghzadeh Irani P, Goodarzi S, et al. The effect of garlic tablets on endometriosis-related pains: a randomized placebo-controlled clinical trial. Evid Based Complement Alternat Med. 2021; 2021:5547058. doi:10.1155/2021/5547058.
13. Ried K, Toben C, Fakler P. Effect of garlic on serum lipids: An updated meta-analysis. Nutr Rev. 2013 May; 71(5): 282-299. doi: 10.1111/nure.12012
14. Melguizo-Rodríguez L, García-Recio E, Ruiz C, De Luna-Bertos E, Illescas-Montes R, Costela-Ruiz VJ. Biological properties and therapeutic applications of garlic and its components. Food Funct. 2021; 12(9): 3844-3863. doi:10.1039/D1FO00180E.
15. Rahnama P, Rahimzadeh M, Montazeri A, Anbari K. Effect of garlic on lipid metabolism in rats fed high cholesterol diet. Pak J Biol Sci. 2012 Jan; 15(2): 98-102. doi: 10.3923/pjbs.2012.98.102
16. Ashraf R, Khan RA, Ashraf I, Qureshi AA. Effects of garlic on blood pressure in patients with essential hypertension. Nutr J. 2013 May; 12: 84. doi: 10.1186/1475-2891-12-84.
17. Sobenin IA, Andrianova IV, Demidova OM, Gorchakova TV, Orekhov AN. Lipid-lowering effects of time-released garlic powder tablets in double-blinded placebo-controlled randomized study. J Atheroscler Thromb. 2008 Dec; 15(6): 334-338. doi: 10.5551/jat.E584
18. Kulamarva K, Savitha HP. An open-label, single-arm pilot study to evaluate the efficacy of Lashuna capsule in psychological symptoms during menopausal transition. Ann Ayurvedic Med. 2023; 12(2): 169-177. doi:10.5455/AAM.110271.
19. Mostafa RM, Moustafa YM, Mirghani Z, AlKusayer GM, Moustafa KM. Antioxidant effect of garlic (Allium sativum) and black seeds (Nigella sativa) in healthy postmenopausal women. SAGE Open Med. 2013; 1: 2050312113517501. doi: 10.1177/2050312113517501.
20. Charde SH, Joshi A, Raut J. A comprehensive review on postmenopausal osteoporosis in women. Cureus. 2023 Nov 9; 15(11): e48582. doi:10.7759/ cureus. 48582

Cite this article as:
Divya Rani. S.R. The Therapeutic Potential of Lashuna (Allium sativum) in Gynecological Disorders: An Integrative Review. International Journal of Ayurveda and Pharma Research. 2025;13(2):50-52.
https://doi.org/10.47070/ijapr.v13i2.3569
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Divya Rani.S.R
Associate Professor and Head,
Dept of Prasutitantra & Striroga,
Sree Narayana Institute of Ayurveda Studies & Research,
Kollam, Kerala.
Email: divyasus.sr@gmail.com