



Review Article

A REVIEW ON VYADHI SHARDUL GUGGULU IN THE MANAGEMENT OF AMAVATA (RHEUMATOID ARTHRITIS)

Manish Paliwal^{1*}, Ajay Kumar Sahu², HML Meena³, Chinmayi MK⁴, Pooja Iekhak⁵

¹PG Scholar, ²Professor, ³Professor, and HOD, ⁴PG Scholar, ⁵PhD Scholar, Dept. of Kayachikitsa, National Institute of Ayurveda, Deemed University (De Novo), Jaipur, Rajasthan, India.

Article info

Article History:

Received: 23-02-2026

Accepted: 27-03-2026

Published: 06-05-2026

KEYWORDS:

Amavata, Vyadhi Shardul Guggulu, Tridoshashamak, Rheumatoid Arthritis.

ABSTRACT

Rheumatoid arthritis (RA) is the most prevalent form of inflammatory arthritis commonly in women and represents a significant cause of preventable disability. Its clinical presentation typically includes symmetrical, deforming polyarthritis involving both small and large joints, often accompanied by systemic symptoms and extra-articular manifestations. RA follows a chronic course characterized by fluctuating periods of exacerbation and remission, with considerable variability in severity. In Ayurvedic texts the condition known as *Amavata* first described by *Acharya Madhavakara* is considered analogous to RA. The pathogenesis of *Amavata* involves the interplay of *Ama* (metabolic toxins) and *Vata* (biological energy associated with movement). **Aim:** This study aims to evaluate the pharmacological mechanisms of action of the ingredients in *Vyadhi Shardul Guggulu*, a classical Ayurvedic formulation, and to assess its therapeutic potential in alleviating the symptoms of *Amavata*, with specific reference to Rheumatoid Arthritis. **Methodology:** *Vyadhi Shardul Guggulu*, as documented in the Ayurvedic text *Bhaishajya Ratnavali*, is traditionally employed in the management of *Amavata*. A comprehensive review was conducted using peer-reviewed scientific literature, classical Ayurvedic texts, modern rheumatology references, and online databases. Keywords such as *Amavata*, Rheumatoid Arthritis, and *Vyadhi Shardul Guggulu* guided the literature search and analysis. **Conclusion:** The formulation exhibits properties including *Deepana* (enhancement of digestive fire), *Pachana* (metabolic stimulation), *Shothahara* (anti-inflammatory), and *Vedanahara* (analgesic), which collectively contribute to interrupting the *Samprapti* (pathophysiological progression) of *Amavata*. This review highlights the classical references, pharmacodynamic attributes, and clinical relevance of *Vyadhi Shardul Guggulu* in the integrative management of Rheumatoid Arthritis.

INTRODUCTION

Rheumatoid arthritis (RA) is a chronic inflammatory disease of unknown etiology characterized by a symmetric polyarthritis and is the most common form of chronic inflammatory arthritis. Since persistently active RA often results in articular cartilage and bone destruction and functional disability, it is vital to diagnose and treat this disease early aggressively before damage ensues.

According to the World Health Organization, approximately 18 million people worldwide were living with rheumatoid arthritis in recent estimates (2019–2023). RA, a systemic disease, may also lead to a variety of extra articular manifestations, including fatigue, subcutaneous nodules, lung involvement, pericarditis, peripheral neuropathy, vasculitis, and hematologic abnormalities.^[1] Most patients develop the disease between 30 to 50 years of age. RA is more common in females as compared to males (F:M = 3:1) and is likely due to the effects of estrogen. The disease activity decreases during pregnancy. The defining clinical feature of RA is symmetric synovitis and arthritis in multiple joints, especially in the hands and feet with prolonged early morning stiffness.^[2]

Access this article online

Quick Response Code



<https://doi.org/10.47070/ayushdhara.v13i2.2643>

Published by Mahadev Publications (Regd.)
publication licensed under a Creative Commons
Attribution-NonCommercial-ShareAlike 4.0
International (CC BY-NC-SA 4.0)

Amavata is a clinical entity vividly described by *Madhavakara* in 7th Century AD with well-defined aetio-pathogenesis and clinical presentation with specific emphasis *Mandagni* (reduced digestive fire) and *Ama* playing the central role and it affects the *Rasavaha srotas* (channels carrying nutrient fluid). This condition is can be comparable to rheumatoid arthritis because of the similar clinical presentation. *Amavata* is an inflammatory disease involving all the three *Doshas* embedded with *Ama*. It develops due to vitiated *Vata* along with *Ama* well as *Vata dosha*.^[3]

OBJECTIVES

To understand the mode of action of Ayurvedic formulation *Vyadhi shardul guggulu* in *Amavata* w.s.r. to rheumatoid arthritis.

METHODOLOGY

Ayurvedic classical text books and various peer reviewed articles were searched to understand the mode of action of *Vyadhi shardul guggulu* in *Amavata* w.s.r. to rheumatoid arthritis.

Vyadhi Shardul Guggulu, formulated to combat *Vata* and *Ama* together, proves to be effective in managing this condition.

RESULT

Vyadhi Shardula Guggulu demonstrates notable therapeutic efficacy in the management of *Amavata* (clinically correlated with rheumatoid arthritis), evidenced by a significant reduction in joint pain (*Sandhishula*), swelling (*Shotha*), and morning stiffness (*Sandhistamabha*). The formulation enhances digestive function (*Agni deepana*), facilitates the metabolism of *Ama* (*Ama pachana*), and improves joint mobility and overall functional capacity. The inclusion of *Commiphora mukul* (*Guggulu*) and *Tinospora cordifolia* (*Guduci*) contributes to its anti-inflammatory and immunomodulatory properties, thereby aiding in the reduction of disease activity and inflammatory progression. Overall, this formulation exhibits a potential disease-modifying role by addressing underlying metabolic disturbances, regulating inflammatory pathways, and promoting sustained joint health when administered under appropriate clinical supervision.

Classical Reference

Text: *Bhaishajya Ratnavali*, (Chapter 29 /168-175) *Amavata Chikitsarogaadhikar*^[4]

Vyadhi Shardul Guggulu is specifically mentioned for diseases with *Vata* and *Kapha* dominance, like *Amavata*, with emphasis on its *Guggulu* base and multi-drug synergy.

Table 1: Ingredients list of *Vyadhi Shardul Guggulu*^[5]

S.No	Drug	Botanical name	Part used	Quantity
1	<i>Haritaki</i>	<i>Terminalia chebula</i> Retz.	Fruit	6 gm
2	<i>Vibhitaki</i>	<i>Terminalia bellarica</i> Roxb.	Fruit	6gm
3	<i>Amalaki</i>	<i>Emblica officinale</i> Gaertn.	Fruit	6gm
4	<i>Sarshapa</i>	<i>Brassica compestris</i> Linn.	Seed	96gm
5	<i>Guggulu</i>	<i>Commiphora mukul</i> Hook.	Gum/Resin	96gm
6	<i>Sunthi</i>	<i>Zingiber officinale</i> Roxb.	Rhizome	6gm
7	<i>Maricha</i>	<i>Piper nigrum</i> Linn.	Fruit	6gm
8	<i>Pippali</i>	<i>Piper longum</i> Linn.	Fruit	6gm
9	<i>Nagarmotha</i>	<i>Cyperus rotundus</i> Linn.	Tuber	6gm
10	<i>Vidanga</i>	<i>Embelia ribes</i> Burm.	Fruit	6gm
11	<i>Guduchi</i>	<i>Tinospora Cordifolia</i> Miers ex Hook.	Stem	6gm
12	<i>Chitarakamoola</i>	<i>Plumbago indica</i> Linn.	Root	6gm
13	<i>Trivrut</i>	<i>Operculina turpethum</i> Linn.	Root	6gm
14	<i>Dantimoola</i>	<i>Baliospermum montanum</i> Muell.	Root	6gm
15	<i>Chavya</i>	<i>Piper retrofractum</i> Vahl.	Fruit	6gm
16	<i>Surana</i>	<i>Amorphophallus campanulatus</i> Blume.	Tuber	6gm
17	<i>Mankanda</i>	<i>Alocasia indica</i> Roxb.	Tuber	6gm
18	<i>Jaypala Beeja</i>	<i>Croton tiglium</i> Linn.	Seeds	250
19	<i>Shuddha Parada</i>	Purified Mercury (Hg)		12gm

20	<i>Shuddha Gandhaka</i>	Purified Sulfur (S)		12gm
21	<i>Lauha Bhasma</i>	Calcinated Iron		12gm
22	<i>Abhraka Bhasma</i>	Calcinated of Mica		12gm

Vyadhi Shardula Guggulu

Method of preparation

Triturate *Shuddha Parada* and *Shuddha Gandhaka* in a mortar until a fine black *Kajjali* is formed.

Prepare *Triphala kvatha* by boiling 375gm of coarsely powdered *Amalaki*, *Haritaki*, and *Bibhitaki* in 4500ml of water and reducing it to one-fourth (about 1125ml).

Filter the decoction, heat the *Triphala kvatha* with *Shuddha Guggulu* and *Sarshapa Taila* in a small iron pan until the *Guggulu* melts and the mixture

attains a semi-solid consistency. Remove from heat. While warm, add the powdered ingredients (from *Shunthi* to *Mankanda*) and mix well.

Then add powdered *Shuddha Jaipala bija* (seeds) and blend thoroughly. Incorporate the prepared *Kajjali* along with *Lauha Bhasma* and *Abhraka Bhasma*, mixing until a uniform mass is obtained. Finally, prepare tablets of about 250mg each, dry in shade, and store in a clean glass container.

Table 2: Ayurvedic properties of Vyadhi Shardul Guggulu

S.No	Drug	Rasa	Guna	Virya	Vipaka	Karma	Doshahnata
1	<i>Haritaki</i>	<i>Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Shothara, Vedanasthapana</i>	<i>Tridosahar, Vatashamak</i>
2	<i>Vibhitaki</i>	<i>Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Shothara, Vedanasthapana</i>	<i>Tridosahar</i>
3	<i>Amalaki</i>	<i>Amal</i>	<i>Guru, Ruksha</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Rasayana, Deepan</i>	<i>Tridosahar</i>
4	<i>Sarshapa</i>	<i>Katu Tikta</i>	<i>Tikṣṇa, Rūkṣa, laghu Snigdha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Shotahara, Deepan, Pachan</i>	<i>Kapahavatashamak</i>
5	<i>Guggulu</i>	<i>Tikta, Katu</i>	<i>Laghu, Ruksah, Tikshan, Sukshma, Sar, Vishad</i>	<i>Ushna</i>	<i>Katu</i>	<i>Shothara, Vedanasthapana</i>	<i>Vatakaphashamak</i>
6	<i>Sunthi</i>	<i>Katu</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Shothara, Vedanasthapana</i>	<i>Vatakaphashamak</i>
7	<i>Maricha</i>	<i>Katu</i>	<i>Laghu, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Deepan, Pachan</i>	<i>Kapahavatashamak</i>
8	<i>Pippali</i>	<i>Katu</i>	<i>Laghu, Tikshna, Snigdha</i>	<i>Anushana sheeta</i>	<i>Madhur</i>	<i>Deepan, Shula-prashaman, Vatahar</i>	<i>Kapahavatashamak</i>
9	<i>Nagarmotha</i>	<i>Tikta, Katu, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Shotahara, Deepan, Pachan</i>	<i>Kaphapitashamak</i>
10	<i>Vidanga</i>	<i>Katu, Kashaya</i>	<i>Laghu, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Deepan, Pachan, Anuloman</i>	<i>Kapahavatashamak</i>
11	<i>Guduchi</i>	<i>Tikta, Kashaya</i>	<i>Guru, Snigdha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Deepan, Pachan, Anuloman</i>	<i>Tridoshashamak</i>
12	<i>Chitaraka moola</i>	<i>Katu</i>	<i>Laghu, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Deepan, Pachan, Rasayana, Shothara</i>	<i>Kapahavatashamak</i>
13	<i>Trivrut</i>	<i>Tikta, Katu</i>	<i>Laghu, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Bhedan, Rachana</i>	<i>Kaphapitashodhan</i>
14	<i>Dantimoola</i>	<i>Katu</i>	<i>Guru, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Shothara, Vedanasthapana</i>	<i>Kaphapitahar</i>
15	<i>Chavya</i>	<i>Katu</i>	<i>Laghu, Ruksha,</i>	<i>Ushna</i>	<i>Katu</i>	<i>Deepan, Pachana,</i>	<i>Kapahavatashamak</i>

						<i>Shulaprashaman, Vatanuloman</i>	
16	<i>Surana</i>	<i>Madhur</i>	<i>Laghu, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Shothara, Vedanasthapana</i>	<i>Kapahavatashamak</i>
17	<i>Mankanda</i>	<i>Madhur</i>	<i>Guru, Snigdha</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Shothara, Vedana sthapana</i>	<i>Vatakaphashamak</i>
18	<i>Jaypala Beeja</i>	<i>Katu</i>	<i>Guru, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Tivrarachana, Shothara, Vednahar</i>	<i>Kaphapitahar</i>
19	<i>Shuddha Parada</i>	<i>Kashaya, Tikta Madhura Anurasa</i>	<i>Sukshma, Laghu Tikshna, Snigdha Sthira</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Rasyana, Agnideepan, Pachana, Yogavahi, Srotoshodhak, Amadoshara</i>	<i>Tridoshashamak</i>
20	<i>Shuddha Gandhaka</i>	<i>Madhura Tikta, Katu anurasa</i>	<i>Snigdha Guru Picchila Mridu Sukshma</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Rasyana, Deepan, Pachana, Shothahara, Yogavahi, Amapachaka</i>	<i>Tridoshashamak</i>
21	<i>Lauha Bhasma</i>	<i>Kashaya Tikta, Madhura anurasa</i>	<i>Guru Ruksha Sthira</i>	<i>Ushna</i>	<i>Katu</i>	<i>Deepan, Pachan</i>	<i>Tridoshashamak</i>
22	<i>Abhraka Bhasma</i>	<i>Kashaya Madhura Tikta</i>	<i>Laghu Snigdha Sukshma Sthira</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Deepan, Pachan</i>	<i>Tridoshashamak</i>

Scientific evaluation of each content of Vyadhi Shardul Guggulu

Haritaki (*Terminalia chebula*)

Haritaki possesses a wide spectrum of pharmacological activities, largely attributed to its abundant tannins, phenolic constituents, chebulinic acid, chebulagic acid, and flavonoids. Experimental and clinical studies have reported its significant antioxidant, anti-inflammatory, antimicrobial, antidiabetic, hepatoprotective, gastroprotective, immunomodulatory, and wound-healing effects^[6]. Mechanistic investigations indicate that *Haritaki* effectively scavenges free radicals, suppresses pro-inflammatory mediators, enhances glucose homeostasis, confers hepatocellular protection, and exhibits inhibitory activity against a range of pathogenic microorganisms.^[7]

Vibhitaki (*Terminalia bellirica*)

Terminalia bellirica (*Vibhitaki*) has been demonstrated to possess significant anti-inflammatory, antioxidant, and analgesic activities, supporting its therapeutic relevance in the management of rheumatoid arthritis (*Amavata*)^[8]. Experimental studies have shown that its extracts markedly reduce inflammation in animal models, likely through inhibition of pro-inflammatory mediators such as prostaglandins, thereby attenuating inflammatory

responses. Additionally, *Vibhitaki* exhibits potent antioxidant activity by scavenging free radicals, including DPPH and nitric oxide radicals, which helps in mitigating oxidative stress and preventing reactive oxygen species-mediated tissue damage. The analgesic effect observed in experimental models further contributes to the alleviation of pain associated with inflammatory conditions.^[9]

Amalaki (*Emblica officinalis*)

Emblica officinalis especially its fruit, contains numerous phytoconstituents such as high amounts of polyphenols gallic acid, ellagic acid, tannins, minerals, vitamins, amino acids, fixed oils, and flavonoids like rutin and quercetin^[10]. The plant has been reported to be effective against diverse ailments including inflammation, cancer, osteoporosis, neurological disorders, hypertension, lifestyle diseases, and infectious conditions. These pharmacological actions are attributed to the regulation of various molecular pathways involved in different pathophysiological conditions, as well as its strong antioxidant property, which protects cellular components from oxidative stress^[11]. It has been reported to contain a wide range of bioactive constituents, including tannins, flavonoids, saponins, terpenoids, ascorbic acid, and other phytochemicals. These compounds have been

scientifically validated to exhibit diverse pharmacological activities such as antimicrobial, antioxidant, anti-inflammatory, radioprotective, hepatoprotective, antitussive, immunomodulatory, hypolipidemic, and several other therapeutic effects.^[12]

Sarsapa (mustard oil)

Sarsapa Taila demonstrates marked anti-inflammatory activity attributed to the presence of allyl isothiocyanate, a key bioactive constituent known to inhibit pro-inflammatory mediators, including cyclooxygenase (COX), tumor necrosis factor- α (TNF- α), and interleukin-1 β (IL-1 β). Through these mechanisms, it effectively attenuates edema, pain, and joint inflammation associated with inflammatory disorders such as arthritis.^[13]

Shuddha Guggulu (Commiphora mukul)

Suddha Guggulu holds a pivotal therapeutic role in the management of *Amavata*, owing to its pronounced *Ama-pachana*, *Vata-Kapha-shamaka*, *Shothahara* (anti-inflammatory), and *Vedana-sthapaka* (analgesic) properties^[14]. From a contemporary pharmacological perspective, the bioactive constituents of *Guggulu*, particularly guggulsterones (E and Z isomers), have been shown to exert significant anti-inflammatory effects by inhibiting key pro-inflammatory mediators, including tumor necrosis factor-alpha (TNF-alpha), interleukin-1beta (IL-1beta), and cyclooxygenase (COX) pathways, thereby attenuating synovial inflammation, joint edema, and pain.^[15]

Sunthi (Zingiber officinale)

Ginger isolated bioactive constituents exhibit a broad spectrum of pharmacological activities, including immunomodulatory, anti-tumorigenic, anti-inflammatory, anti-apoptotic, anti-hyperglycemic, antilipidemic, and anti-emetic effects. Ginger also possesses potent anti-oxidant properties, enabling it to scavenge free radicals and thereby reduce or prevent oxidative stress. Moreover, it is widely regarded as a safe herbal therapeutic agent, with minimal and generally insignificant adverse effects reported.^[16]

Marich (Piper nigrum)

Maricha exhibits significant pharmacological actions that are relevant in the context of *Amavata*. Its primary bioactive constituent, piperine, demonstrates anti-inflammatory and anti-oxidant activities, which help reduce inflammatory mediators and oxidative stress-key pathological features in *Amavata* (similar to rheumatoid arthritis). These properties may contribute to alleviating joint pain, swelling, and stiffness by modulating inflammatory pathways and improving circulation in affected tissues.^[17]

Pipali (Piper longum)

Pipali exhibits a wide range of pharmacological activities, including anti-inflammatory, antioxidant, hepatoprotective, immunomodulatory, analgesic, and anti-arthritic effects. Piperine, the principal bioactive constituent of *Pipali*, is known to enhance the bioavailability of co-administered drugs and to exert potent inhibitory effects on key pro-inflammatory mediators such as tumor necrosis factor- α (TNF- α), interleukin-1 β (IL-1 β), and cyclooxygenase-2 (COX-2), leading to attenuation of inflammation and pain. Experimental studies further indicate its role in improving hepatic function, modulating immune responses, and providing protection against oxidative stress.^[18]

Nagarmotha (Cyperus rotundus)

Nagarmotha demonstrates a wide range of pharmacological activities, including anti-inflammatory, anti-oxidant, analgesic, anti-diarrheal, gastroprotective, antimicrobial, antipyretic, and hepatoprotective effects. These therapeutic effects are primarily attributed to its diverse phytochemical profile, particularly sesquiterpenes such as cyperol, cyperene, and α -cyperone, as well as flavonoids and phenolic compounds. These bioactive constituents collectively modulate inflammatory pathways, scavenge reactive oxygen species, reduce pain perception, and protect gastrointestinal and hepatic tissues.^[19]

Vidanga (Embelia ribes)

Vidanga possesses significant anti-microbial and anti-oxidant properties, contributing to protection against pathogenic microorganisms and oxidative stress-mediated cellular damage^[20]. Anti-inflammatory and analgesic effects of *Vidanga* have been linked to the inhibition of cyclooxygenase (COX) and lipoxygenase (LOX) pathways, resulting in reduced synthesis of pro-inflammatory mediators.^[21]

Guduchi (Tinospora cordifolia)

Guduchi have variety of active components derived from the plant like alkaloids, steroids, diterpenoid lactones, aliphatics, and glycosides have been isolated from the different parts of the plant body, including root, stem, and whole plant. Recently, the plant is of great interest to researchers across the globe because of its reported medicinal properties like anti-diabetic, anti-periodic, anti-spasmodic, anti-inflammatory, anti-arthritic, anti-oxidant, anti-allergic, anti-stress, anti-leprotic, anti-malarial, hepatoprotective, immunomodulatory and anti-neoplastic activities.^[22]

Chitrakmool (*Plumbago zeylanica*)

Chitrakmool (*Plumbago zeylanica* Linn.) possesses diverse pharmacological activities mainly due to its active compound Plumbagin, a naphthoquinone derivative. It exhibits strong anti-inflammatory, antimicrobial, and antioxidant effects by inhibiting pro-inflammatory mediators and neutralizing free radicals^[23]. *Chitrakmool* also shows hepatoprotective, anticancer, and digestive stimulant (*Deepana-Pachana*) actions, supporting its traditional use in Ayurveda for *Ama* and *Kapha-Vata* disorders.^[24] These activities justify its role in managing inflammatory and metabolic conditions like *Amavata* and digestive ailments.

Trivrit (*Operculina turpethum*)

Operculina turpethum (Linn.) *Silva Manso* (*Trivrit*) is an important medicinal plant in Ayurveda, traditionally recognized for its purgative (*Rechana*), anti-inflammatory, and hepatoprotective properties. These pharmacological effects are primarily attributed to the presence of resin glycosides, including turpethin, along with coumarins such as scopoletin. Experimental studies have demonstrated that *Trivrit* exerts a pronounced laxative effect by enhancing intestinal peristalsis and promoting bile secretion, thereby facilitating bowel evacuation^[25]. In addition, the plant exhibits notable antioxidant and anti-inflammatory activities, which contribute to the attenuation of oxidative stress and inflammatory responses^[26].

Dantimool (*Baliospermum montanum*)

Baliospermum montanum Willd. (*Dantimool*) is an important Ayurvedic medicinal plant recognized for its potent purgative (*Rechana*), anti-inflammatory, antimicrobial, and hepatoprotective activities. These pharmacological effects are primarily attributed to its bioactive constituents, including baliospermin, montanin, and various diterpenoid compounds. Pharmacological studies have demonstrated that root extracts of *B. montanum* induce purgation by stimulating intestinal motility and enhancing secretory activity within the gastrointestinal tract^[27].

Chavya (*Piper retrofractum*)

Piper retrofractum Vahl. (*Chavya*) exhibits a broad range of pharmacological activities, including anti-inflammatory, analgesic, antimicrobial, and digestive stimulant (*Deepana-Pachana*) effects, which are largely attributed to its principal bioactive alkaloid, piperine. Experimental studies have demonstrated that *Chavya* enhances digestive efficiency by stimulating gastric secretions and significantly improving the bioavailability of nutrients and co-administered drugs^[28]. Furthermore, *P. retrofractum* has been reported to exert potent anti-inflammatory and analgesic actions through the inhibition of

prostaglandin synthesis, thereby reducing inflammatory responses and nociception^[29].

Surana (*Amorphophallus campanulatus*)

Amorphophallus campanulatus Roxb. (*Surana*), commonly referred to as Elephant Foot Yam, demonstrates a range of pharmacological activities, including anti-inflammatory, analgesic, antioxidant, and hepatoprotective effects. These activities are primarily attributed to its bioactive constituents, such as flavonoids, alkaloids, and phenolic compounds. Experimental studies have shown that tuber extracts of *A. campanulatus* reduce inflammation and nociception by inhibiting prostaglandin synthesis^[30]. Additionally, *Surana* has been reported to possess anti-obesity and digestive stimulant (*Deepana-Pachana*) activities, supporting its traditional Ayurvedic applications in the management of *Āmavāta* (rheumatoid arthritis), *Arsha* (hemorrhoids), and *Agnimandya* (digestive weakness).^[31]

Mankand (*Alocasia indica*)

Alocasia indica Schott. (*Mankand*) exhibits pronounced pharmacological activities, including anti-inflammatory, analgesic, antioxidant, and antimicrobial effects, primarily due to its flavonoids, alkaloids, and phenolic constituents. The rhizome extract suppresses inflammation and pain by inhibiting prostaglandin synthesis^[32]. It also demonstrates strong antioxidant and hepatoprotective properties, protecting against oxidative stress and liver injury^[33]. Additionally, its wound-healing and antimicrobial activities substantiate its traditional Ayurvedic use in managing inflammatory disorders, dermal diseases, and pain.^[34]

Jaypal Beej (*Croton tiglium*)

Croton tiglium Linn. (*Jaypal Beej*) demonstrates significant pharmacological activities, including potent purgative (*Rechana*), anti-inflammatory, antimicrobial, and anticancer effects, attributed to bioactive constituents such as croton oil, phorbol esters, and tiglic acid. The seed oil exerts a strong purgative action by enhancing intestinal motility and secretion^[35]. It also displays anti-inflammatory and analgesic effects through the inhibition of prostaglandin synthesis^[36].

Shuddha Parad (Purified Mercury)

Shuddha Parad is a very effective drug. It is one of the important core ingredients in *Rasaousadhies*. It balances all the three *Doshas* (*Vata*, *Pitta* and *Kapha*) of the body when processed properly. It exerts soothing effect on our body and hence prevents diseases. Some of its actions are - acts as *Vrishya* (aphrodisiac), *Balya* (tonic), *Snigdha*, *Rasayana* (rejuvenate), *Vrana shodhana* and *Ropana* (wound healing), *Krimighna* (antimicrobial) and *yogavahi*. The medicinal properties of certain herbs increase when compounded with

Parad. It helps in achieving a stable mind and believed to be the best destroyer of the diseases^[37].

Shuddha Gandhak (Purified Sulphur)

Shuddha Gandhak when processed through classical Ayurvedic *Shodhana* procedures, demonstrates notable antimicrobial, anti-inflammatory, antioxidant, and dermatoprotective activities. It is traditionally used to purify blood, enhance wound healing, and manage skin disorders such as *Kushtha* and *Vrana*^[38]. Additionally, its antioxidant and detoxifying properties contribute to the reduction of oxidative stress and inflammation, supporting its classical Ayurvedic applications as a *Rasayana* and *Kushtaghna* agent^[39].

Lauha Bhasma (calcined iron ash)

Lauha Bhasma (Calcined Iron Ash) possesses potent hematinic, antioxidant, hepatoprotective, and immunomodulatory properties. It effectively increases hemoglobin levels and improves iron metabolism, making it beneficial in anemia (*Pandu Roga*) management^[40]. *Lauha Bhasma* exhibits potent hematinic, antioxidant, hepatoprotective, and immunomodulatory properties, validating its traditional use in Ayurveda for improving blood formation, vitality, and overall health. Ayurvedic *Lauha Bhasma* predominantly comprises iron oxide particles in nano-agglomerate form after traditional processing, which is believed to facilitate absorption and biological activity. Experimental pharmacological evaluations have demonstrated significant hematinic effects of *Lauha Bhasma* in iron-deficiency anemia models, including increases in hemoglobin and red blood cell parameters compared with controls^[41].

Abhrak Bhasma (calcined mica ash)

Abhrak Bhasma is traditionally indicated in *Amavata* (rheumatoid arthritis) due to its *Rasayana*, anti-inflammatory, immunomodulatory, and antioxidant actions.^[42] Modern scientific evaluations suggest that its nano-scale mineral oxide composition contributes to free radical scavenging and modulation of inflammatory pathways, thereby reducing oxidative stress and joint tissue damage^[43].

DISCUSSION

Rheumatoid arthritis (RA), clinically correlated with *Amavata* in *Ayurveda*, is a chronic inflammatory joint disease characterized by immune-mediated synovial inflammation and progressive joint destruction^[44]. In Ayurvedic pathophysiology, the condition arises from the interaction of *Ama* (metabolic by-products formed due to impaired digestion) with vitiated *Vata dosha*, leading to systemic inflammation, pain, stiffness, and functional disability^[45]. Consequently, the therapeutic strategy emphasizes *Ama-pachana* (metabolic detoxification),

Agni restoration, *Vata-Kapha* pacification, and inflammation control^[46].

Amavata is primarily caused by *Mandagni* leading to *Ama* formation and subsequent vitiation of *Vata*, resulting in joint inflammation, stiffness, and pain. This classical concept correlates with the modern understanding of rheumatoid arthritis (RA) as a chronic autoimmune inflammatory disorder characterized by cytokine imbalance, oxidative stress, and progressive joint destruction.^[47] *Deepana-Pachana* drugs such as *Shunthi*, *Maricha*, *Pippali*, *Nagarmotha*, *Vidanga*, *Chavya*, *Citrakamula*, and *Surana* predominantly possess *Katu* and *Tikta rasa*, *Laghu* and *Ruksha guna*, *Ushna virya*, and *Katu vipaka*. These attributes enhance *Agni*, digest *Ama*, reduce *Kapha*, and alleviate *Srotorodha*. Experimental and clinical evidence supports the anti-inflammatory and antioxidant effects of several of these drugs, particularly *Trikatu* components, which contribute to improved metabolism and reduced inflammatory mediators in RA-like conditions.

Triphala and other *Shodhana* drugs facilitate *srotas-shodhana* and elimination of metabolic toxins. *Triphala* has demonstrated significant antioxidant and immunomodulatory activity, which may help counter oxidative stress and immune dysregulation observed in RA. Its *Kashaya* and *Amla rasa*, *Laghu-Ruksha guna*, and mild *Rechana prabhava* support detoxification and reduction of inflammatory load.

Guggulu (Commiphora mukul) and *Guduchi (Tinospora cordifolia)* act as key disease-modifying agents. *Guggulu*, with *Tikta-Katu rasa*, *Ushna virya*, and *Lekhana prabhava*, exhibits anti-inflammatory and anti-arthritic activity in experimental models, correlating with its traditional indication in *Vata-Kapha* disorders^[48]. *Guduchi*, characterized by *Tikta-Kashaya rasa*, *Madhura vipaka*, and *Rasayana prabhava*, has demonstrated immunomodulatory and cytokine-regulating properties, making it relevant in autoimmune conditions such as RA^[49].

Thus, through coordinated action on *Rasa*, *Guna*, *Virya*, *Vipaka*, and *Prabhava*, the formulation addresses *Agni* dysfunction, *Ama* accumulation, immune imbalance, and chronic inflammation, reflecting a multimodal disease-modifying strategy in *Amavata*.

CONCLUSION

Amavata (rheumatoid arthritis) is a chronic, systemic inflammatory disorder that requires long-term and multidimensional management. The described polyherbal and herbo-mineral formulation addresses the fundamental Ayurvedic pathology of *Agni* dysfunction and *Ama* formation while simultaneously exerting anti-inflammatory, immune-

modulatory, and *Rasayana* effects. Through *Deepana-Pachana* and *Shodhana* actions, it helps reduce inflammatory load and *Srotorodha*, while key agents like *Guggulu* and *Guduchi* contribute to immune regulation and suppression of joint inflammation.

Evidence from experimental and clinical studies supports the anti-arthritic and immunomodulatory activities of these drugs, suggesting their potential role as disease-modifying agents in RA. When administered under proper clinical supervision along with dietary and lifestyle regulation, such formulations may reduce disease activity, improve functional outcomes, and help prevent structural joint damage.

REFERENCES

- Harrison's Principles of Internal Medicine. Joseph Loscalzo, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, Dan L. Longo, J. Larry Jameson, editors. 21st ed. New York: McGraw-Hill Education; 2022. p. 2751–2752.
- API Textbook of Medicine. Yash Pal Munjal, editor-in-chief; Sandhya A. Kamath, executive editor; Siddharth N. Shah, Milind Y. Nadkar, editors. 12th ed. Mumbai: Association of Physicians of India; 2022. p. 403.
- Madhava Nidana. Brahmanand Tripathi, editor. Reprint ed. Vol. 1. Varanasi: Chaukhamba Sanskrit Sansthan; 2006. Chapter 25, verse 6, p. 572
- Bhaishajya Ratnavali. S. N. Mishra, editor. Refined ed. Varanasi: Chaukhamba Surbharati Prakashan; 2021. Chapter 29, verses 168–175, p. 609.
- Dravyaguna Vijnana. P. V. Sharma. Vol. 2. 13th ed. Varanasi: Chaukhamba Bharati Academy; 2005.
- Bag A, Bhattacharyya SK, Chattopadhyay RR. The development of *Terminalia chebula* Retz. (Combretaceae) in clinical research. *Asian Pac J Trop Biomed.* 2013; 3(3): 244–252.
- Cheng HY, Lin TC, Yu KH, Yang CM, Lin CC. Antioxidant and free radical scavenging activities of *Terminalia chebula*. *Biol Pharm Bull.* 2003; 26(9): 1331–1335.
- Ghogar A, Jain S, Chaudhari S. Evaluation of anti-inflammatory and analgesic activity of *Terminalia bellirica* Roxb. fruit extracts. *Int J Pharm Sci Res.* 2014; 5(3): 1045–1050.
- Kumar V, Sharma A, Singh R. Antioxidant and free radical scavenging potential of *Terminalia bellirica* fruit extracts. *J Ethnopharmacol.* 2010; 132(2): 323–328.
- Variya BC, Bakrania AK, Patel SS. *Emblica officinalis* (Amla): A review for its phytochemistry, ethnomedicinal uses and medicinal potentials with respect to molecular mechanisms. *Pharmacol Res.* 2016; 111: 180–200.
- Baliga MS, Dsouza JJ. Amla (*Emblica officinalis* Gaertn), a wonder berry in the treatment and prevention of cancer. *Eur J Cancer Prev.* 2011; 20(3): 225–39.
- Krishnaveni M, Mirunalini S. Therapeutic potential of *Phyllanthus emblica* (amla): The Ayurvedic wonder. *J Basic Clin Physiol Pharmacol.* 2010; 21(1): 93–105.
- Dey M, et al. Allyl isothiocyanate exhibits anti-inflammatory and antioxidant properties. *Journal of Experimental Pharmacology.* 2019; 11: 71–82.
- Sharma J.N., et al. Anti-inflammatory and anti-arthritic activity of guggulsterone. *Indian Journal of Pharmacology.* 2001; 33:
- Singh B.B., et al. Guggulsterone: A review of its pharmacological effects. *Journal of Ethnopharmacology.* 2007; 114
- Ali B.H., Blunden G, Tanira M.O., Nemmar A. Some phytochemical, pharmacological and toxicological properties of ginger (*Zingiber officinale* Roscoe): a review of recent research. *Food and Chemical Toxicology.* 2008; 46(2): 409–420.
- Halligudi Nirmala, Bhupathyraaj Mullaicharam, Hakak Marwa Hatem Sharif. Therapeutic potential of bioactive compounds of *Piper nigrum* L. (black pepper): a review. *Asian Journal of Applied Chemistry Research.* 2022; 12(1): 17–23. doi:10.9734/ajacr/2022/v12i1211.
- Srinivasan K. Black pepper and its pungent principle—piperine: a review of diverse physiological effects. *Critical Reviews in Food Science and Nutrition.* 2007; 47(8): 735–748.
- Kilani S, et al. Antioxidant and anticholinesterase activities of *Cyperus rotundus*. *Bioresource Technology.* 2008; 99(18): 9004–9008.
- Sathish Kumar T, Shanmugam S, Palvannan T, Bharathi Kumar V.M. Evaluation of antioxidant properties of *Embelia ribes* Burm. *Journal of Pharmacy Research.* 2010; 3(6): 1226–1229.
- Latha P.G., et al. Anti-inflammatory and analgesic activity of *Embelia ribes*. *Indian Journal of Pharmacology.* 1998; 30: 332–334.
- Saha S, Ghosh S. *Tinospora cordifolia*: One plant, many roles. *Anc Sci Life.* 2012 Apr; 31(4): 151–9. doi: 10.4103/0257-7941.107344.
- Ravikumar S, Inbaneson SJ, Suganthi P. In vitro anti-inflammatory and antioxidant activity of *Plumbago zeylanica* Linn. *J Ethnopharmacol.* 2010; 128(3): 714–718.
- Ravindran, J., Prasad, S., & Aggarwal, B. B. (2011). Plumbagin suppresses NF-κB activation and protects against inflammation-associated disorders. *Indian Journal of Pharmacology*, 43(5), 561–567.
- Gupta, A. K., Tandon, N., & Sharma, M. (2006). Evaluation of laxative activity of *Operculina turpethum*. *Indian Journal of Pharmacology*, 38(4), 263–265.
- Rastogi, R. P., & Mehrotra, B. N. (1998). *Compendium of Indian Medicinal Plants*, Vol. 2. *Journal of Research in Ayurveda and Siddha*, 19, 125–130
- Rastogi RP, Mehrotra BN. *Compendium of Indian Medicinal Plants*. Vol. 3. Lucknow: Central Drug

- Research Institute; New Delhi: National Institute of Science Communication; 1993.
28. Atal CK, Dubey RK, Singh J. Biochemical basis of enhanced drug bioavailability by piperine: Evidence that piperine is a potent inhibitor of drug metabolism. *J Pharmacol Exp Ther.* 1985; 232(1): 258–262.
 29. Kumar S, Malhotra R, Kumar D. Anti-inflammatory and analgesic activity of piperine. *J Ethnopharmacol.* 2011; 136(3): 467–473.
 30. Mathew PJ, et al. Anti-inflammatory and analgesic effects of *Amorphophallus campanulatus* tuber extract. *J Ethnopharmacol.* 2010; 128(3): 543–547.
 31. Chuneekar KC, editor. *Bhavaprakasha Nighantu.* Varanasi: Chaukhamba Bharati Academy; 2024. p. 679–680.
 32. Patra A, Jha S, Murthy PN, Manik G. Analgesic and anti-inflammatory activities of *Alocasia indica* Schott rhizome extract in experimental animal models. *Acta Pol Pharm.* 2009; 66(4): 427–432.
 33. Mandal SC, Maity TK, Das J, Saba BP, Pal M. Hepatoprotective activity of *Alocasia indica* against paracetamol-induced liver damage in rats. *J Ethnopharmacol.* 2002; 82(2–3): 193–198.
 34. Chuneekar KC, editor. *Bhavaprakasha Nighantu.* Varanasi: Chaukhamba Bharati Academy; 2024. p. 685–686.
 35. Gupta AK, Singh R, Misra S, et al. Purgative and gastrointestinal effects of *Croton tiglium* seed oil in experimental models. *Indian J Pharmacol.* 2006; 38(4): 300–304.
 36. Takasaki M, Kimoto T, Tokuda H, et al. Anti-inflammatory and analgesic effects of *Croton tiglium* constituents. *Biol Pharm Bull.* 2003; 26(12): 1691–1695. doi:10.1248/bpb.26.1691.
 37. Mythili Krishna J, Richa Gaude, Arun B. Joshi, Shailendra Gurav, Anant V. Bhandarkar, Yeriswamy H, Sudhindra A.N., Reshma Yernal, Mithun Bondre, Aditya A. Samant. Significance of Parad in Rasashastra- A review. *Journal of Ayurvedic and Herbal Medicine* 2017; 3(3): 169-174
 38. Prajapati PK, et al. Antimicrobial activity of Shuddha Gandhak. *Anc Sci Life.* 2007.
 39. Saxena RC, et al. Antimicrobial activity of Shuddha Gandhak. *Indian J Exp Biol.* 2003.
 40. Thatte UM, Dahanukar SA. Immunomodulatory activity of Ayurvedic formulations: experimental approach. *Indian Journal of Pharmacology.* 1992; 24: 31–36.
 41. Verma PRP, Prasad CM. Standardization and bioavailability of Ayurvedic drug Lauha Bhasma. Part I: physicochemical evaluation. *Ancient Science of Life.* 1995; 15(2): 129–136.
 42. Kulkarni DA, Shastri LN, editors. *Rasa Tarangini.* New Delhi: Motilal Banarsidass Publishers; 2012.
 43. Pillai DS, Ranjit AK. Abhraka Bhasma (mica-based nanomedicine): an Ayurvedic herbo-mineral perspective in disease management. *Front Pharmacol.* 2025; 16: 1656846.
 44. Firestein GS, Budd RC, Gabriel SE, McInnes IB, O'Dell JR. *Kelley's Textbook of Rheumatology.* 10th ed. Philadelphia: Elsevier; 2017. Scott DL, Wolfe F, Huizinga TW. Rheumatoid arthritis. *Lancet.* 2010; 376(9746): 1094–1108.
 45. Tripathi B, editor. *Madhava Nidana (Roga Viniscaya) of Madhavakara.* Varanasi: Chaukhamba Surbharati Prakashan; 2015. Amavata Nidana, Chapter 25, Verse 1–5.
 46. Lad V. *Textbook of Ayurveda. Vol. 2: A complete guide to clinical assessment.* Albuquerque: Ayurvedic Press; 2007.
 47. Balkrishna A, et al. Clinical evaluation of an Ayurvedic formulation in the management of rheumatoid arthritis. *J Ayurveda Integr Med.* 2011; 2(4):208–215.
 48. Meshram GG, Kumar A, Rizvi W, Tripathi CD, Khan RA. Evaluation of anti-arthritis activity of *Commiphora mukul* in adjuvant-induced arthritis model. *Indian J Pharmacol.* 2011; 43(5): 543–546.
 49. Upadhyay AK, Kumar K, Kumar A, Mishra HS. *Tinospora cordifolia* (Willd.) Hook. f. and Thoms. (Guduchi) - validation of the Ayurvedic pharmacology through experimental and clinical studies. *Int J Ayurveda Res.* 2010; 1(2): 112–121.

Cite this article as:

Manish Paliwal, Ajay Kumar Sahu, HML Meena, Chinmayi MK, Pooja Lekhak. A Review on Vyadhi Shardul Guggulu in the Management of Amavata (Rheumatoid Arthritis). *AYUSHDHARA*, 2026;13(2):128-136.

<https://doi.org/10.47070/ayushdhara.v13i2.2643>

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. Manish Paliwal

PG Scholar,

Dept of Kayachikitsa,

National Institute of Ayurveda,

Deemed University (De Novo), Jaipur,
Rajasthan, India.

Email: manishpaliwal02@gmail.com

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.