

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 13, Issue 7, 139-145.

Review Article

ISSN 2277-7105

A CONCEPTUAL REVIEW ON THE UNDERSTANDING OF RHEUMATOID ARTHRITIS IN AYURVEDA

Athira C. K.*1, Shrilatha Kamath T.2

¹PG Scholar, Department of PG Studies in Kayachikitsa, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Kuthpady, Udupi- 574118, Karnataka, India.

²Professor and Head, Department of PG Studies in Kayachikitsa, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Kuthpady, Udupi- 574118, Karnataka, India.

Article Received on 07 Feb. 2024.

Revised on 28 Feb. 2024. Accepted on 19 March 2024

DOI: 10.20959/wjpr20247-31730



*Corresponding Author Athira C. K.

PG Scholar, Department of PG Studies in Kayachikitsa, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Kuthpady, Udupi- 574118, Karnataka, India.

ABSTRACT

Rheumatoid arthritis (RA) is a common form of inflammatory arthritis, occurring throughout the world in all ethnic group. It is a chronic systemic autoimmune disease with varying severity among patients. The cause of the disease is still unknown. RA initially affects small joints, progressing to larger joints, and eventually the skin, eyes, heart, kidneys, and lungs. It imposes a substantial socioeconomic burden on individuals and is one of the challenging disorders for the clinicians due to its chronicity, incurability and morbidity. As contemporary medical science aims at relieving the signs and symptoms of the disease by administering NSAIDS, analgesics etc. Ayurveda, an ancient system of medicine explains well about joint disorders. This article is a simple attempt to explore the Ayurvedic perspective on rheumatoid arthritis through an analysis of its causative factors, pathology, clinical features and prognosis, while considering Vatarakta, Amavata and Samavata.

KEYWORDS: Rheumatoid arthritis. *Vatarakta*, *Amayata*, *Samayata*.

INTRODUCTION

Rheumatoid arthritis is a chronic multisystem disease of unknown cause, characterized by persistent inflammatory synovitis, usually involving peripheral joints in a symmetric distribution. The potential of the synovial inflammation to cause cartilage destruction and bone erosion and subsequent changes in joints integrity is the hallmark of the disease.^[1] Epidemiological survey done by COPCORD shows a prevalence of 0.45% in urban and 0.7% in rural population.^[2] Around 18 million people worldwide are living with rheumatoid arthritis. The typical onset of the disease occurs in adults in their sixties and women are two-to-three times more often affected than men.^[3]

In *Vatarakta*, *Vata* and *Rakta* with their own causative factors get vitiated and dosas get accumulated in the *Sandhipradesa*. These vitiated dosas along with other dosas produce different types of pain. *Uttana* and *Gambeera* stage of *Vatarakta* shows different kinds of symptoms. In *Amavata*, *Ama* and *Vata* simultaneously get vitiated and enters the *Sandhi* leading to the manifestation of the disease. *Sama* is the state where *Ama* combines with *Dosha* and *Dushya*, causing their vitiation and giving rise to various diseases. ⁴ *Samavata* is characterized by *Agnisada*, *Tantra*, *Toda* and *Shopha*. By proper analysis and understanding of the ailment using the *Ayurvedic* approach, suitable measures can be efficiently implemented.

AIM

To understand Rheumatoid arthritis in *Ayurvedic* perspective.

MATERIALS AND METHOD

For this study, literary method which includes the reference of Rheumatoid Arthritis, *Vatarakta*, *Amavata* and *Samavata* have been collected from modern textbooks, journals and ayurvedic classics.

NIDANA

The exact cause of RA is not fully known.² It has been suggested that RA might be a manifestation of the response to an infectious agent in a genetically susceptible host. Women are affected approximately three times more often than men.¹ Consumption of processed meats, sugary beverages like soda, sedentary behavior and obesity are recognized as a risk factor associated with RA.^[5,6,7]

Virudhahara, Sukumara prakriti and Sthoulya are recognized as Nidanas of Vatarakta. [8,9] Intake of foods which are Lavana, Amla and Katu Rasa pradhana, Kshara and excessive

intake of *Sura*, *Asava* and *Souviraka* are the factors specifically responsible for *Rakta Dushti*.^[10] In *Amavata*, *Virudhahara* and *Nishchalatha* are considered as causative factors.^[11]

SAMPRAPTI

Genetic predisposition and environmental variables trigger autoimmune reaction leads to release of inflammatory mediators and cytokines which drive synoviocytes to proliferate and produce proteases in the synovial fluid resulting in a hypertrophied synovial tissue known as pannus.^[12] Pannus invades bone and cartilage to cause joint erosion. Formation of new blood vessels causing the inflamed synovium to become highly vascular. Within these blood vessels proinflammatory cytokines activates endothelial cells, which support recruitment of yet more leucocytes to perpetuate the inflammatory process in Rhematoid Arthritis.^[13]

In *Vatarakta*, when person restoring *Vata* and *Rakta Prakopa Nidana*, they individually get vitiated. The vitiated *Rakta* obstruct the path of *Vata* leads to further aggravation of vata which tend to vitiate the entire *Rakta* in the body. *Dravatwa* and *Saratwa Guna* of *Rakta* and *Sookshmatwa* and *Saratwa Guna* of *Vata* helps to spreads entire body. Due to the *Vakratha* of *Sandhi* these gets settles in *Sandhi* and associated with *Pitta* produce symptoms of *Vatarakta*.^[8]

In *Amavata*, *Ama* is taken up by the vata to the *Kaphasthana* mainly *Amashaya*, *Uras*, *Shiras*, *Kantha* and *Sandhi* and enters the *Dhamani*. Here it amalgmates with the existing *Doshas* which vitiated further in excess and distress the *Srotas* due to its *Abhishyandana* nature. This causes *Dourbalya* and *Gourava* of *Hridaya* responsible for the genesis of the symptom complex, manifestation of disease *Amavata*.^[11] *Samavata* is a phase of the disease in which ama resulting from *Agnimandhya*, combines with vata leads to its vitiation. The vitiated *Dosha* circulates throughout the body and gets localized in the site of *Khavaigunya* results in the manifestation of disease.

PURVARUPA

RA begins insidiously with fatigue, generalized weakness and vague musculoskeletal symptoms until the appearance of synovitis becomes apparent. This prodrome may persist for weak or months.^[1]

Purvarupa of Vatarakta includes Sadana, Sandhitoda, Bheda, Suptata, Kandu and Karshnya while Shirogatra Ruja is mentioned as Purvarupa of Amavata. [8,14]

RUPA

Rheumatoid arthritis is characterized by pain in joints that worsens with movement, particularly affecting the small joints of the hands, feet, and wrists. It also involves larger joints. Morning stiffness is a invariable feature of inflammatory arthritis. Constitutional symptoms such as weakness, easily fatigability, anorexia and weight loss and occasional fever are observed in RA. Clinically, synovial inflammation causes swelling, tenderness, warmth, erythrma, muscle wasting and limitation of motion. Over time, specific deformities such as Swan neck deformity, Boutonniere deformity, and Z deformity may emerge, accompanied by flexion contractures. In rheumatoid arthritis, cutaneous ulceration and dermal necrosis and cardiomyopathy may develop, particularly in chronic stages of the disease. [1,13]

In the beginning, Lakshanas of Vatarakta is manifested in Hasta and Pada. From this base, it spreads to all the other parts of the body. Vatarakta Lakshanas include Sparshaakshamatvam, Svayadhu, Raga, Athyarthoshna, Sthambha, Angulivakrata, Shosha, Jwara, Dhamaniangulisandheenam Sankocha, Paka and Mamsakotha. Rakta Dushti Lakshanas such as Shyavalohita Vaivarnya of Twak, Aruchi, Klama, Daha can be observed in Vatarakta.

Samanya Amavata Lakshanas are Angamarda, Aruchi, Jwara, Agnidourbalya and Alasya while Pravridha Amavata Lakshanas include Ruja and Shotha in Hastapadashirogulphatrikajanuru Sandhi, Gatra Sthambha and Utsahahani. It can cause Dourbalva and Gourava of Hridaya. [11] Samavata state is characterized Vedanashophanistoda, Tantra, Sthambha and Agnisada. The symptoms tend to manifest more prominently during Survameghadavonishi. [4]

PROGNOSIS

Early in the course of RA disability is more associated with pain and inflammation, whereas later in the course of the disease, damages to articular structures makes a great contribution. Sustained disease activity of more than one year duration is associated with poor outcome of the disease.^[1]

Vatarakta with a duration of one year is *Yapya*.^[9] *Amavata* associated with swelling all over the body indicates that the disease is *Krichrasadhya*.^[11]

DISCUSSION

Rheumatoid Arthritis in its cause, pathogenesis, signs & Symptoms having many similar features with Gambheera Vatarakta, Amayata and in Samayata condition. Processed meat and sugar sweetened soda, recognized as a risk factor for Rheumatoid Arthritis aligns with the concept of Virudhahara, a causative factor mentioned in Amavata and Vatarakta. Symptoms like pain, swelling, redness, stiffness, fever, anorexia and fatigue are seen in Rheumatoid Arthritis, Amavata, and Vatarakta. Articular pain in RA is commonly centered on the smaller joints of the hands and feet, although it may also extend to larger joints. The initial occurrence of pain in *Vatarakta* is localized to the smaller joints of the hands and feet. In Amavata, the condition impacts all joints, including the hands, feet, head, heels, waist, knees, and thighs. RA is characterized by joint swelling and stiffness, Gambhira Vatarakta exhibits symptoms of Swayathu and Sthambha. Swayathu is identified as a manifestation of Prayrudha Amayata, and Sthambha is considered as the cardinal feature of Amayata. Fever may be evident in rheumatoid arthritis as one of its clinical features. In Vatarakta, Jwara is noted among its complication. On the other hand, in Amavata, Jwara is highlighted as one of the initial symptoms. Erythema in RA is denoted as Raga in both Pittaja Vatarakta and Amavata.

Sedentary lifestyle is identified as risk factors for RA, whereas *Nishchalatha* are causative factors for *Amavata*. In the prodromal phase of RA indistinct musculoskeletal symptoms may manifest. *Shirogatra Ruja* is recognized as a premonitory symptom of *Amavata*. Additionally, cardiomyopathy is mentioned in the context of RA, while *Hrudaya Dourbalya* is associated with *Amavata*.

Obesity is linked to an elevated likelihood of developing RA, whereas *Sthoulya* is recognized as a causative factor for *Vatarakta*. There are specific joint deformities commonly associated with rheumatoid arthritis such as swan neck deformity, boutonniere deformity, z deformity. Chronic inflammation in the blood vessel walls leads to Cutaneous ulceration and dermal necrosis in RA. *Vatarakta* affected in deeper *Dhathu* shows similar manifestation such as *Angulivakrata* and *Mamsakoda*. Persisting disease activity lasting beyond one year is associated with poor outcome of RA. In the context of *Vatarakta*, this is analogous to the *Yapya* condition.

The symptoms of RA including pain and swelling are described as *Vedanashophanistoda* in the context of *Samavata*. Morning stiffness is a significant feature of RA. In *Samavata*, symptoms tend to manifest more prominently during *Suryameghadayonishi*.

CONCLUSION

According to the *Brhatrayees*, rheumatoid arthritis can be regarded as *Gambheera Vatarakta* while in the perspective of *Laghutrayees*, it can be viewed as *Amavata*. *Samavata* represents a phase of the disease.

REFERENCE

- Harrison T R. Disorders of Immune Mediated Injury. Longo D L, Fauci A S, Kasper D L, Hauser S L, Jameson, Lozcalzo J, Braunwald E. Harrioson's principles of internal medicine, 17th ed. MCGraw Hill medical, 2008; 2083-2089.
- 2. Krishnadas K V. Rheumatoid Arthritis and its varients. Text of Medicine, 6th ed. NewDelhi, Japee Brothers MedicalPublishers, 2017; 719-720.
- 3. GBD 2019: Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. https://vizhub.healthdata.org/gbd-results/.
- Vagbhata. Sastri H S, editor. Astangahrdaya with Sarvangasundara commentary of Arunadatta and Ayurvedarasayana commentary of Hemadri, Sutrasthana; Doshopakramaniyadhyaya: 13/27. 1st ed. New Delhi: Choukhamba publication; Reprint, 2018; 216.
- Nezamoleslami, S., Ghiasvand, R., Feizi, A. et al. The relationship between dietary patterns and rheumatoid arthritis: a case—control study. Nutr Metab (Lond), 2020; 17: 75. https://doi.org/10.1186/s12986-020-00502-7
- Sally A M Fenton, Jet J C S Veldhuijzen van Zanten, Joan L Duda, George S Metsios, George D Kitas, Sedentary behaviour in rheumatoid arthritis: definition, measurement and implications for health, Rheumatology, February 2018; 57(2): 213–226. https://doi.org/10.1093/rheumatology/kex053
- 7. George MD, Baker JF. The Obesity Epidemic and Consequences for Rheumatoid Arthritis Care. Curr Rheumatol Rep., Jan., 2016; 18(1): 6. https://doi.org/10.1007%2Fs11926-015-0550-z

- 8. Agnivesha. Charakasamhita with Ayurvedadeepika commentary of Chakrapanidatta, Chikitsasthana: vatasonitachikitsa: 29/7-34. 1st ed. Varanasi: Chowkamba Sanskrit Sansthan; Reprint, 2020; 627-629.
- 9. Susruta. Jadvji Trikamji Acharya, editor. Susruta Samhita with Nibandhasangraha commentary of Dalhanacharaya, Nidanasthana; Vatavyadhinidhana: 1/41-50. 1st ed. Varanasi: Choukhamba Sanskrit Sansthan; reprint, 2017; 263-264.
- Agnivesha. Charakasamhita with Ayurvedadeepika commentary of Chakrapanidatta, sutrasthana: vidhishonitheeyam: 24/5-14. 1sted. Varanasi: Chowkamba Sanskrit Sansthan; Reprint, 2020; 124.
- 11. Madhavakara. Jadvji Trikamji Acharya, editor. Madhava Nidanam with Madhukosha commentary by vijayrakshita and Srikanthadatta; Amavata: 25/1-12. 6th ed. Varanasi: Chaukhambha Sansthan, 2001; 186-188.
- 12. Sweta, Archana Chaudhary, Vinay Pandit, M. S. Ashawat, Tarun Kumar. Rheumatoid Arthritis, A Laconic Review to understand their Basic Concept and Management Process. Asian Journal of Pharmaceutical Research, 2022; 12(4): 312-2. doi: 10.52711/2231-5691.2022.00051 available on https://asianjpr.com/AbstractView.aspx?PID=2022-12-4-10
- 13. Davidson S. Rheumatology and Bone Disease. Penman I D, Ralston S H, Strachan M WJ, Hobson R P. Davidson's Principles and Practice of Medicine, 24th ed. Elsevier, 2022; 1027-1029.
- 14. Saxena Nirmal, English translation on Vangasena Samhita of Vangasena. Amavata: 31/5. 1st ed. Varanasi: Chowkamba Sanskrit series office, 2004; 478.