

 ISSN (O): 2320-5407 ISSN (P): 3107-4928	Journal Homepage: - www.journalijar.com INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR) Article DOI: 10.21474/IJAR01/22150 DOI URL: http://dx.doi.org/10.21474/IJAR01/22150	
--	--	---

RESEARCH ARTICLE

A CASE STUDY ON THE ROLE OF AYURVEDIC INTERVENTIONS IN RHEUMATOID ARTHRITIS AND HYPERTENSION

Acharya Manish¹, Gitika Chaudhary², Richa³, Amandeep Singh⁴ and Tanu Rani⁵

1. Director, Meditation Guru, Jeena Sikho Lifecare Limited, India.
2. Senior Consultant, General Surgeon, Bams, Pgdi, Pgds, Ms (Ayurveda), Jeena Sikho Lifecare Limited, India.
3. Senior Research Officer, Bams, Pgdi, Cicr, Caim, Cmw, Jeena Sikho Lifecare Limited, India.
4. Consultant, Bams, Jeenasikholicare Limited Hospital, Amritsar, Punjab, India.
5. Research Associate, Bams, Jeena Sikho Lifecare Limited, India.

Manuscript Info

Manuscript History

Received: 06 September 2025
Final Accepted: 08 October 2025
Published: November 2025

Key words:-

Rheumatoid Arthritis (RA), Ayurveda, Panchakarma, Hypertension, Amavata, Srotorodha, Abhyanga, Swedana

Abstract

Rheumatoid Arthritis (RA) is a chronic autoimmune disorder that primarily affects the joints, leading to persistent inflammation, pain, swelling, stiffness, and progressive joint destruction. The condition is associated with various risk factors, including advancing age, female gender, genetic predisposition, and environmental triggers like smoking and improper dietary habits. Modern treatments focus on managing synovial inflammation through medication, while Ayurveda approaches RA as Amavata, a disorder involving impaired digestion and the accumulation of toxins in the joints. Ayurvedic therapies aim to restore balance, detoxify the body, and alleviate symptoms through treatments like Panchakarma. This case study explores the integration of Ayurvedic treatments with conventional therapies for managing RA and associated hypertension in a 51-year-old female patient, treated at Jeena Sikho Lifecare Limited Hospital, Amritsar, Punjab. The patient underwent a comprehensive Ayurvedic regimen, including JanuBasti, JanuLepam, NadiSwedan, and PatraPindaSwedan, in addition to Ayurvedic formulations. Significant improvements were observed in pain, swelling, joint mobility, and blood pressure, with reductions in inflammatory markers (Rheumatoid Factor, Anti-CCP, ESR). This case highlights the potential of combining traditional and modern treatments in managing RA and associated comorbidities. Further clinical trials are necessary to validate these findings.

"© 2025 by the Author(s). Published by IJAR under CC BY 4.0. Unrestricted use allowed with credit to the author."

Introduction:-

Rheumatoid arthritis (RA) is a chronic autoimmune disorder primarily affecting the Sandhis (joints) and, in some cases, other organ systems. It is marked by persistent inflammation, leading to Sandhishoola (joint pain), Sandhishotha (joint swelling), Stabdhata (stiffness), and joint destruction, significantly impairing quality of life. Risk factors include StriJati, BeejaDosha, advancing age, and environmental triggers such as smoking and improper

Corresponding Author:- Gitika Chaudhary

Address:- Senior Consultant, General Surgeon, Bams, Pgdi, Pgds, Ms (Ayurveda), Jeena Sikho Lifecare Limited, India.

dietary habits ^[1,2]. RA also increases the risk of cardiovascular diseases and RaktaVahaSrotasVikara ^[2,3]. Modern research links RA to synovial inflammation driven by genetic susceptibility and environmental influences ^[3]. RA is further associated with an increased risk of RaktachapVridhhi (hypertension), primarily due to inflammatory mechanisms. Studies highlight the role of TNF-alpha and related cytokines in this association ^[4,5]. A Canadian study found that 26% of early RA patients had hypertension at baseline, with another 24% developing it over five years. Traditional risk factors such as VridhhaAvastha (advanced age), Sthoulya (overweight), and Medoroga (hyperlipidemia) further contribute to hypertension in RA patients ^[6].

In Ayurveda, RA corresponds to Amavata, as described in texts like MadhavaNidana and CharakaSamhita. It arises from Agnimandya, leading to the formation of Ama, which associates with Vitiated VataDosha, accumulating in the Sandhis and causing inflammation. Symptoms include Angamarda, Trishna, Jwara, and Gaurava. Ayurvedic management focuses on Deepana-Pachana, Virechana, and Basti therapies to detoxify and balance Doshas. Several studies highlight the effectiveness of Ayurveda in managing RA and associated hypertension. A case study reported a 50% symptom reduction after a Panchakarma regimen with MarmaChikitsa^[7]. Another clinical trial involving 37 RA patients showed significant improvements in joint mobility, reduced inflammation, and normalized metabolic profiles after three months of Ayurvedic Whole System (AWS) interventions^[8]. From a biomedical perspective, Mendelian randomization studies show a slight but significant association between RA and hypertension^[4]. Chronic inflammation from cytokines like TNF-alpha is a major contributor to RaktachapVridhhi, and metabolic dysfunctions, such as insulin resistance, are prevalent in RA patients, increasing hypertension risk. The METS-IR index has been proposed for predicting hypertension in RA patients^[9]. RA patients also face a 50% higher risk of developing HrudayaRoga, though disease-specific cardiovascular risk calculators remain inconclusive^[10].

Ayurveda offers a holistic approach to managing RA and hypertension. Panchakarma therapies like Virechana and Basti detoxify the body and balance Doshas. Marma Therapy has shown promising results in reducing pain and improving joint function. Ayurvedic formulations like Dashamoola and Guggulu-based compounds have strong anti-inflammatory and metabolic-balancing properties ^[11]. Dietary interventions, including LaghuAhara, Haridra, and Agni-enhancing medications, further aid symptom management. Ayurvedic therapies promote Dhatusamya (metabolic balance), improving systemic health [8]. Many patients prefer Ayurveda for its SahajaUpachara and minimal side effects compared to conventional treatments ^[12]. This study aims to assess the impact of Ayurvedic interventions combined with conventional treatments for Amavata with hypertension in a 51-year-old female patient.

Case Report:-

On March 6, 2024, a 51-year-old female who had a history of Rheumatoid arthritis for 2 years with hypertension visited Jeena Sikho Lifecare Limited Hospital, Amritsar, Punjab. The patient was diagnosed with Amavata. A comprehensive medical history, family history, physical examination, and diagnostic evaluations were all part of the methodical and thorough examination. Her sister has a history of RA. She was affected with jaundice 1 year before the visit and was having allopathic medications. Her Nadi was Vataj pittaj and malin/snigdghjivha. She was taking allopathic medications like methotrexate, folic acid, hydroxychloroquine, methyprednisolone, calcium citrate and risedronate sodium. Her symptoms were both the knee pain with swelling, joints stiffness, whole body pain, gastritis and acidity. The initial assessment during the treatment period is mentioned in **Table 1**. The laboratory investigation reports during the treatment period is mentioned in **Table 2**.

Table 1The initial assessment during the treatment period

[illegible]

Table 2. The laboratory investigation reports during the treatment period

Parameter	Findings		
Date	07/02/2024	17/03/2024	25/03/2024
Haemoglobin	9 gm/dL	10 gm/dL	7.5 gm/dL
Total leucocyte count	7.13 thou/cum	8.1 thou/cum	7.5 thou/cum
RBC count	3.45 mill/cumm	3.60 mill/cumm	3.60 mill/cumm
Platelets count	216 thou/ μ L	250 thou/ μ L	255 thou/ μ L
ESR	36 mm/1 Hr	28 mm/1 Hr	22 mm/1 Hr
Rheumatoid factor	31.2 U/ml	45 U/ml	26 U/ml
Uric acid	-	5.0 mg/dl	2.4 mg/dl
Anti CCP	100 U/ml	50 U/ml	45 U/ml

MRI scan was done for knee on March 15, 2024, in which reduced space, rheumatoid arthritis, soft tissue oedema and bone erosion were concluded. The patient was then admitted for IPD treatment on March 17, 2024. The patient was discharged on March 2, 2024. The vitals and Ashtasthanapareeksha during the discharge is mentioned in Table 3.

Table 3. The vitals and Ashtasthanapareeksha during the discharge

Parameter	Findings
Blood Pressure	
Pulse Rate	
Weight	
<i>Nadi</i>	
<i>Mutra</i>	
<i>Shabda</i>	
<i>Mala</i>	
<i>Drik</i>	
<i>Sparsh</i>	
<i>Akriti</i>	

An accurately designed DIP Diet was provided to the patient to complement the Ayurvedic treatments administered for Rheumatoid arthritis^[13]:

Treatment Plan:-

I. Diet Plan:-

Dietary Guidelines from Jeena Sikho Lifecare Limited Hospital:

- Avoid wheat, refined foods, dairy, coffee, tea, and packaged foods.
- Do not eat after 8 PM.
- When eating solid foods, take small bites and chew each bite 32 times.

Hydration:

- Sip water slowly, mindful of the amount consumed each time.
- Aim to drink 1 liter of alkaline water 3 to 4 times a day.
- Incorporate herbal tea, living water, and turmeric-infused water into your daily routine.
- Boil 2 liters of water and reduce it to 1 liter before drinking.

Millet Consumption:

- Include five types of millet in your diet: Foxtail, Barnyard, Little, Kodo, and Browntop millet.
- Cook the millets in mustard oil using stainless steel cookware.

Meal Timing and Structure:-

- Early Morning (5:45 AM): Begin with herbal tea along with raw ginger and turmeric.
- Breakfast (8:30-9:30 AM): Have fruits (Apple/Papaya) and a fermented millet shake.
- Morning Snacks (11:00-11:20 AM): 100 gm of sprouts and 150 ml of red juice and soaked almonds.
- Lunch (12:30 PM - 2:00 PM): Two plates—Plate 1: steamed salad; Plate 2: cooked millet-based dish.
- Evening Snacks: Green juice/ red juice (100-150 ml) and roasted makhana.
- Dinner (6:15-7:30 PM): Plate 1: raw salad, chutney, green garden delight, and soup; Plate 2: millet khichdi/ fermented millets/ millet chapati.
- Night: Ayushkwath

Fasting:

- It is recommended to fast for one day.

Special Instructions:

- Offer thanks to the divine before eating or drinking.
- Practice Vajrasana after every meal.
- Take a slow 10-minute walk after each meal.

Diet Types:

- The diet includes low-salt solid, semi-solid, and smoothie options.
- Suggested foods include herbal tea, red juice, green juice, a variety of steamed fruits, fermented millet shakes, soaked almonds, and steamed salads.

Lifestyle Recommendations:-

1. Include meditation as a method for relieving stress.
2. Practice Yoga (Sukhasana and Sukshma Pranayama) between 6:00 AM and 7:00 AM.
3. Go for a brisk 30-minute barefoot walk.
4. Aim for 6-8 hours of restful sleep each night.
5. Follow a structured daily routine to maintain balance and organization in your life.

Panchakarma procedures administered to patients**Janubastiwith murivenatailam[14,15]****Procedure:-**

- The patient was comfortably positioned, and a dough ring was placed around the knee joint to hold the MurivennaTailam.
- 300 mlMurivennaTailamwas gently heated to a lukewarm temperature and poured into the dough ring, fully covering the knee joint.
- The oil remained on the knee for 30 minutes, with the oil replenished as needed to maintain warmth and effectiveness.
- After the procedure, the dough ring was removed, excess oil was wiped off, and the knee was massaged with warm MurivennaTailam for enhanced relief and absorption.

Physiology and Mode of action

- MurivennaTailam penetrates the skin, delivering anti-inflammatory and pain-relieving properties to the knee joint, reducing swelling and discomfort caused by conditions like arthritis or injury.
- The warmth from the oil enhances local blood circulation, bringing oxygen and nutrients to the tissues, accelerating healing, and promoting the repair of damaged muscles and ligaments.
- The warm oil relaxes the muscles around the knee, improving flexibility and reducing stiffness, while the heat helps soften the joint tissues for smoother movement.
- The oil facilitates detoxification by helping to eliminate metabolic waste from the joint area, reducing stiffness and promoting overall joint health.

JanulepamwithDashmool, Dashang, Trikatuandsonth^[16-20]**Procedure:**

- 50 grams each of Dashmool, Dashang, Trikatu, and Sonth powders were mixed and combined with warm water to form a thick paste.

- The knee joint was cleaned with warm water, and the l paste was applied evenly with a thickness of 0.5 to 1 cm.
- The lepam was left on for 30 to 45 minutes, and the knee was covered with a soft cloth to keep the paste in place.
- The lepam was gently removed using lukewarm water.

Physiology and mode of action

- The paste penetrates the skin and reduces inflammation by inhibiting pro-inflammatory mediators, with Dashmool and Dashang playing key roles in soothing joint inflammation.
- Trikatu and Sonth provide analgesic effects and promote blood circulation, helping relieve pain and reduce muscle stiffness around the knee joint.
- The formulation helps remove metabolic waste and toxins from the tissues, improving joint health and reducing stiffness, thanks to the detoxifying properties of Trikatu and Dashmool.
- Increased blood circulation delivers oxygen and nutrients to the knee joint, supporting tissue regeneration and faster healing of damaged muscles, ligaments, and tendons.

NadiswedanwithDashmoolkwath^[21,22]

Procedure:-

- 20 ml of DashmoolKwath was mixed with 100 ml of water and gently heated until warm.
- The prepared DashmoolKwath was poured into the steam apparatus, which was positioned to direct the steam to the affected area.
- The affected joint was exposed to the steam for 10-15 minutes, allowing the warmth to penetrate the tissues.
- After the steam, the area was wiped with a soft cloth.

Physiology and Mode of action:-

- The steam from DashmoolKwath allows the Ayurvedic compounds to penetrate the skin, enhancing circulation to the affected area, delivering oxygen and nutrients, and removing metabolic waste.
- The heat from the steam relaxes muscles and softens tissues, while the Dashmool provide anti-inflammatory and analgesic effects, reducing pain and stiffness.
- The steam induces sweating, aiding in the removal of toxins from the body, which improves joint health and reduces swelling and inflammation.
- The combination of heat, improved circulation, and reduced inflammation restores joint mobility, while promoting healing and tissue repair in damaged muscles, ligaments, and tendons.

PatraPindaSwedan:-

Procedure:-

- Fresh medicinal leaves were selected and wrapped with a paste of Ayurvedic medicines like turmeric, ginger, and sesame oil to create small bundles (Patras).
- The Patras were heated in a pan until they were warm, activating the medicinal properties.
- The warmed Patra was applied to the affected areas in gentle circular or tapping motions.

Physiology and Mode of action:-

- The heat from the Ayurvedic poultices opens the skin pores, inducing sweating. This helps expel toxins and excess water retention from the body, promoting detoxification.
- The warmth and active Ayurvedic ingredients reduce pain, inflammation, and muscle stiffness, benefiting conditions like arthritis and muscle spasms by improving circulation and soothing the affected tissues.
- PatraPindaSwedan helps balance vata and kaphadoshas, reducing vata-related pain and kapha-related swelling, while improving overall movement and flexibility^[23]

Medicinal Interventions

The Ayurvedic treatment employed in this case included Rakt chapVati, Go Flexi Capsule, Arthri Capsule, AamVaataHarGuggul, JS Cal D+ Capsule, NavakGuggul, Orthonil syrup, Relivon Powder and 32 Herbal Teaalong with Panchakarma therapies. The patient first came for OPD visit on March 6, 2024, the medication prescribed on that day are detailed in **Table 4**. She was on IPD for 9 days, during that period she received consolidated Ayurvedic treatments. This treatment procedure encompassed Panchakarma therapies such as Janubasti with Murivenatailam, Janulepam with Dashmool, Dashang, Trikatu and Sonth, Nadiswedan with Dashmoolkwath and Patrapindaswedan. The

Ayurvedic medications advised during IPD on is detailed in **Table 5**. The medications advised during the discharge is mentioned in **Table 6**. Rakt chap (1 BD Adhobhakta with koshnajala) was prescribed on March 22, 2024. On March 25, 2024 Navakguggul and Go Flexi tablets were advised. The medications advised during the follow upon April 09, 2024 is mentioned in **Table 7**. After 9 days of treatment, the patient experienced significant improvement, including relief from knee pain with swelling, joints stiffness, whole body pain, gastritis and acidity.

Table 4 The medicine advised during the OPD on March 6, 2024

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Relivon Powder	Saverna Patri (<i>Luffa aegyptiaca</i>), Misreya , Senda Namal , Sonth (<i>Zingiber officinale</i>), Jang Harar (<i>Chebulic Myrobalan</i>), and Erاند Oil (<i>Ricinus communis</i>)	3/4 TSF at night (<i>Nishikala</i> with <i>koshna jala</i>)	helps to manage constipation, indigestion, auto immune disease, undigested metabolic waste and rheumatoid arthritis
32 Herbal Tea	Gauzaban (<i>Echium amoenum</i>), Kulanjan (<i>Alpinia galanga</i>), Choti Elaichi (<i>Elettaria cardamomum</i>), Laung (<i>Syzygium aromaticum</i>), Badi Elaichi (<i>Amomum subulatum</i>), Badiyan Khtay (<i>Illicium verum</i>), Banafsha (<i>Viola odorata</i>), Jufa (<i>Clerodendrum serratum</i>), Ashwagandha (<i>Withania somnifera</i>), Mulethi (<i>Glycyrrhiza glabra</i>), Punarnava (<i>Boerhavia diffusa</i>), Brahmi (<i>Bacopa monnieri</i>), Chitrak (<i>Plumbago zeylanica</i>), Kali Mirch (<i>Piper nigrum</i>), Adoosa (<i>Adhatoda vasica</i>), Saunf (<i>Foeniculum vulgare</i>), Shankh Pushp (<i>Evolvulus alsinoides</i>), Tulsi (<i>Ocimum sanctum</i>), Arjuna (<i>Terminalia arjuna</i>), Motha (<i>Cyperus rotundus</i>), Senaye (<i>Cuscuta reflexa</i>), Sonth (<i>Zingiber officinale</i>), Majeeth (<i>Rubia cordifolia</i>), Sarfoka (<i>Sphaeranthus indicus</i>), Dalchini (<i>Cinnamomum verum</i>), Gulab (<i>Rosa spp.</i>), Green Tea (<i>Camellia sinensis</i>), Giloy (<i>Tinospora cordifolia</i>), Tej Patta (<i>Cinnamomum tamala</i>), Lal Chandan (<i>Pterocarpus santalinus</i>), White Chandan (<i>Santalum album</i>), Pudina (<i>Mentha spicata</i>)	SOS	Deepan and pachan
Go Flexi Capsule	Paneer Dodi Powder (<i>Caralluma fimbriata</i>), Ashwagandha Powder (<i>Withania somnifera</i>), Amla Rasayan (<i>Phyllanthus emblica</i>), Yograj Guggul Powder (<i>Commiphora wightii</i>), Methi Powder (<i>Trigonella foenum-graecum</i>), Shankh Bhasma Powder , Gokshura Powder (<i>Tribulus terrestris</i>), Punarnava Powder (<i>Boerhavia diffusa</i>), Nirgundi Powder (<i>Vitex negundo</i>), Haldi Powder (<i>Curcuma longa</i>), Neem Powder (<i>Azadirachta indica</i>).	2 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	Used as analgesic, anti inflammatory, immunity booster and pain killer
Navak Guggul	Shuddha Guggulu (<i>Commiphora mukul</i>), Black Pepper (<i>Kali Mirch</i>) (<i>Piper nigrum</i>), Long Pepper (<i>Pippali</i>) (<i>Piper longum</i>), Dry Ginger (<i>Sonth</i>) (<i>Zingiber officinale</i>), Haritaki (<i>Terminalia chebula</i>), Bibhitaki (<i>Terminalia bellirica</i>), Amla (<i>Indian Gooseberry</i>) (<i>Emblica officinalis</i>), Musta (<i>Nutgrass</i>) (<i>Cyperus rotundus</i>), Chitrak (<i>Leadwort</i>) (<i>Plumbago zeylanica</i>), Vidanga (<i>False Black Pepper</i>) (<i>Embelia ribes</i>).	2 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	enhance digestion, and promote the elimination of toxins
Orthonil syrup	Rasna Patr (<i>Pluchea lanceolata</i>), Peepal (<i>Ficus religiosa</i>), Javasa (<i>Alhagi pseudalhagi</i>), Dhania (<i>Coriandrum sativum</i>), Balamool (<i>Sida cordifolia</i>), Choti Kateri (<i>Solanum surattense</i> / <i>Solanum xanthocarpum</i>), Erاندmool (<i>Ricinus communis</i>), Badi Kateri (<i>Solanum indicum</i>), Devdaru (<i>Cedrus deodara</i>), Bidara (<i>Ziziphus mauritiana</i>), Kachur (<i>Curcuma zedoaria</i>), Saunf (<i>Foeniculum vulgare</i>), Bach (<i>Acorus calamus</i>), Gokhru (<i>Tribulus terrestris</i>), Adulsa (<i>Justicia adhatoda</i>), Ashwagandha (<i>Withania somnifera</i>), Sonth (<i>Zingiber officinale</i>), Atis (<i>Aconitum heterophyllum</i>), Harad (<i>Terminalia chebula</i>), Amaltas Guda (<i>Cassia fistula</i>), Nagarmotha (<i>Cyperus rotundus</i>), Mahua Flower (<i>Madhuca indica</i>), Punarnava (<i>Boerhavia diffusa</i>), Honey (<i>Apis mellifera</i>), Giloy (<i>Tinospora cordifolia</i>), Shaker (<i>Saccharum officinarum</i>), Shatavari (<i>Asparagus racemosus</i>).	3 TSF BD (<i>Adhobhakta</i> with <i>sama matra kosha jala</i>)	Used for joint pain, arthritis, gout, pain in back and indigestion

Table 5The Ayurvedic medications advised during IPD

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Relivon Powder	Saverna Patri (<i>Luffa aegyptiaca</i>), Misreya, Senda Namal, Sonth (<i>Zingiber officinale</i>), Jang Harar (<i>Chebulic Myrobalan</i>), and Erand Oil (<i>Ricinus communis</i>)	3/4 TSF BD (<i>Adhobhakta with Koshna jala</i>)	helps to manage constipation, indigestion, auto immune disease, undigested metabolic waste and rheumatoid arthritis
Go Flexi Capsule	Paneer Dodi Powder (<i>Caralluma fimbriata</i>), Ashwagandha Powder (<i>Withania somnifera</i>), Amla Rasayan (<i>Phyllanthus emblica</i>), Yograj Guggul Powder (<i>Commiphora wightii</i>), Methi Powder (<i>Trigonella foenum-graecum</i>), Shankh Bhasma Powder, Gokshura Powder (<i>Tribulus terrestris</i>), Punarnava Powder (<i>Boerhavia diffusa</i>), Nirgundi Powder (<i>Vitex negundo</i>), Haldi Powder (<i>Curcuma longa</i>), Neem Powder (<i>Azadirachta indica</i>).	2 TAB BD (<i>Adhobhakta with koshna jala</i>)	Used as analgesic, anti inflammatory, immunity booster and pain killer
Navak Guggul	Shuddha Guggulu (<i>Commiphora mukul</i>), Black Pepper (Kali Mirch) (<i>Piper nigrum</i>), Long Pepper (Pippali) (<i>Piper longum</i>), Dry Ginger (Sonth) (<i>Zingiber officinale</i>), Haritaki (<i>Terminalia chebula</i>), Bibhitaki (<i>Terminalia bellirica</i>), Amla (Indian Gooseberry) (<i>Emblica officinalis</i>), Musta (Nutgrass) (<i>Cyperus rotundus</i>), Chitrak (Leadwort) (<i>Plumbago zeylanica</i>), Vidanga (False Black Pepper) (<i>Embelia ribes</i>).	2 TAB BD (<i>Adhobhakta with koshna jala</i>)	enhance digestion, and promote the elimination of toxins
Orthonil syrup	Rasna Patr (<i>Pluchea lanceolata</i>), Peepal (<i>Ficus religiosa</i>), Javasa (<i>Alhagi pseudalhagi</i>), Dhania (<i>Coriandrum sativum</i>), Balamool (<i>Sida cordifolia</i>), Choti Kateri (<i>Solanum surattense</i> / <i>Solanum xanthocarpum</i>), Erandmool (<i>Ricinus communis</i>), Badi Kateri (<i>Solanum indicum</i>), Devdaru (<i>Cedrus deodara</i>), Bidara (<i>Ziziphus mauritiana</i>), Kachur (<i>Curcuma zedoaria</i>), Saunf (<i>Foeniculum vulgare</i>), Bach (<i>Acorus calamus</i>), Gokhru (<i>Tribulus terrestris</i>), Adulsa (<i>Justicia adhatoda</i>), Ashwagandha (<i>Withania somnifera</i>), Sonth (<i>Zingiber officinale</i>), Atis (<i>Aconitum heterophyllum</i>), Harad (<i>Terminalia chebula</i>), Amaltas Guda (<i>Cassia fistula</i>), Nagarmotha (<i>Cyperus rotundus</i>), Mahua Flower (<i>Madhuca indica</i>), Punarnava (<i>Boerhavia diffusa</i>), Honey (<i>Apis mellifera</i>), Giloy (<i>Tinospora cordifolia</i>), Shaker (<i>Saccharum officinarum</i>), Shatavari (<i>Asparagus racemosus</i>).	3 TSF BD (<i>Adhobhakta with sama matra koshna jala</i>)	Used for joint pain, arthritis, gout, pain in back and indigestion

Table 6 The medications advised during discharge

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Go Flexi Capsule	Paneer Dodi Powder (<i>Caralluma fimbriata</i>), Ashwagandha Powder (<i>Withania somnifera</i>), Amla Rasayan (<i>Phyllanthus emblica</i>), Yograj Guggul Powder (<i>Commiphora wightii</i>), Methi Powder (<i>Trigonella foenum-graecum</i>), Shankh Bhasma Powder , Gokshura Powder (<i>Tribulus terrestris</i>), Punarnava Powder (<i>Boerhavia diffusa</i>), Nirgundi Powder (<i>Vitex negundo</i>), Haldi Powder (<i>Curcuma longa</i>), Neem Powder (<i>Azadirachta indica</i>).	2 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	Used as analgesic, anti inflammatory, immunity booster and pain killer
Navak Guggul	Shuddha Guggulu (<i>Commiphora mukul</i>), Black Pepper (Kali Mirch) (<i>Piper nigrum</i>), Long Pepper (Pippali) (<i>Piper longum</i>), Dry Ginger (Sonth) (<i>Zingiber officinale</i>), Haritaki (<i>Terminalia chebula</i>), Bibhitaki (<i>Terminalia bellirica</i>), Amla (Indian Gooseberry) (<i>Emblica officinalis</i>), Musta (Nutgrass) (<i>Cyperus rotundus</i>), Chitrak (Leadwort) (<i>Plumbago zeylanica</i>), Vidanga (False Black Pepper) (<i>Embelia ribes</i>).	2 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	enhance digestion, and promote the elimination of toxins
Orthonil syrup	Rasna Patr (<i>Pluchea lanceolata</i>), Peepal (<i>Ficus religiosa</i>), Javasa (<i>Alhagi pseudalhagi</i>), Dhania (<i>Coriandrum sativum</i>), Balamool (<i>Sida cordifolia</i>), Choti Kateri (<i>Solanum surattense</i> / <i>Solanum xanthocarpum</i>), Erandmool (<i>Ricinus communis</i>), Badi Kateri (<i>Solanum indicum</i>), Devdaru (<i>Cedrus deodara</i>), Bidara (<i>Ziziphus mauritiana</i>), Kachur (<i>Curcuma zedoaria</i>), Saunf (<i>Foeniculum vulgare</i>), Bach (<i>Acorus calamus</i>), Gokhru (<i>Tribulus terrestris</i>), Adulsa (<i>Justicia adhatoda</i>), Ashwagandha (<i>Withania somnifera</i>), Sonth (<i>Zingiber officinale</i>), Atis (<i>Aconitum heterophyllum</i>), Harad (<i>Terminalia chebula</i>), Amaltas Guda (<i>Cassia fistula</i>), Nagarmotha (<i>Cyperus rotundus</i>), Mahua Flower (<i>Madhuca indica</i>), Punarnava (<i>Boerhavia diffusa</i>), Honey (<i>Apis mellifera</i>), Giloy (<i>Tinospora cordifolia</i>), Shaker (<i>Saccharum officinarum</i>), Shatavari (<i>Asparagus racemosus</i>).	3 TSF BD (<i>Adhobhakta</i> with <i>sama matra kosha jala</i>)	Used for joint pain, arthritis, gout, pain in back and indigestion

Table 7 The medications advised during the follow up on April 09, 2024

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Go Flexi Capsule	Paneer Dodi Powder (<i>Caralluma fimbriata</i>), Ashwagandha Powder (<i>Withania somnifera</i>), Amla Rasayan (<i>Phyllanthus emblica</i>), Yograj Guggul Powder (<i>Commiphora wightii</i>), Methi Powder (<i>Trigonella foenum-graecum</i>), Shankh Bhasma Powder , Gokshura Powder (<i>Tribulus terrestris</i>), Punarnava Powder (<i>Boerhavia diffusa</i>), Nirgundi Powder (<i>Vitex negundo</i>), Haldi Powder (<i>Curcuma longa</i>), Neem Powder (<i>Azadirachta indica</i>).	2 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	Used as analgesic, anti inflammatory, immunity booster and pain killer
Arthri Capsule	Nirgundi (<i>Vitex negundo</i>), Nishot (<i>Operculina turpethum</i>), Sonth (<i>Zingiber officinale</i>), Punarnava (<i>Boerhavia diffusa</i>), Giloy (<i>Tinospora cordifolia</i>), Surjana (<i>Moringa oleifera</i>), Harar (<i>Terminalia chebula</i>), Rasna (<i>Pluchea lanceolata</i>), Shuddha (Please provide the complete name for "Shuddha" to format it properly).	2 CAP SOS	Helps to manage Arthritis, joint pain, gout and vaat vyadhi
Aam Vaat Har Gugguul	Sonth (<i>Zingiber officinale</i>), Pippal (<i>Piper longum</i>), Chavya (<i>Piper chaba</i>), Pippal Mula (<i>Piper longum</i> root), Chitraka (<i>Plumbago zeylanica</i>), Hing (<i>Ferula asafoetida</i>), Ajmod (<i>Trachyspermum roxburghianum</i>), Saraso (<i>Brassica juncea</i>), Renuka (<i>Vitex negundo</i>), Inder Jon (<i>Holarrhena antidysenterica</i>), Patha (<i>Cissampelos pareira</i>), Vayavidanga (<i>Embelia ribes</i>), Gajapeepal (<i>Scindapsus officinalis</i>), Kutki (<i>Picrorhiza kurroa</i>), Atees (<i>Aconitum heterophyllum</i>), Bharangee (<i>Clerodendrum serratum</i>), Vacha (<i>Acorus calamus</i>), Murva (<i>Marsdenia tenacissima</i>), Jeera (<i>Cuminum cyminum</i>), Kalaunji (<i>Nigella sativa</i>), Harad (<i>Terminalia chebula</i>), Bahera (<i>Terminalia bellirica</i>), Amla (<i>Emblica officinalis</i>), Guggulu (<i>Commiphora mukul</i>), Vang Bhasma (<i>Calx of Tin</i>), Chandi Bhasma (<i>Calx of Silver</i>), Nag Bhasma (<i>Calx of Lead</i>), Loh Bhasma (<i>Calx of Iron</i>), Mandoor Bhasma (<i>Ferric Oxide Calx</i>), Parad Bhasma (<i>Calx of Mercury</i>), Abhrak Bhasma (<i>Calx of Mica</i>).	2 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	Used for Joint pain, osteoarthritis, vaat vyadhi and gout
JS Cal D+	Shankh bhasma , Godani bhasma , Kapardika bhasma and Ashwagandha (<i>Withania somnifera</i>)	1 TAB BD (<i>Adhobhakta</i> with <i>koshna jala</i>)	Used for joint disorders, fracture, osteoarthritis and osteopenia

Result:-

Effectiveness of Ayurvedic Treatments: The patient underwent IPD for 9 days, after the treatment he experienced noteworthy development in symptoms, which denotes the interventions used in the study are effective against Rheumatoid arthritis with hypertension. At the time of discharge, the patient was well oriented and there was relief from pain, swelling, joint stiffness, gastritis and acidity which shows that the Ayurvedic interventions used in the case study are effective for Rheumatoid arthritis. The laboratory investigations are mentioned in Table no. 2.

Implications for Future Research:-

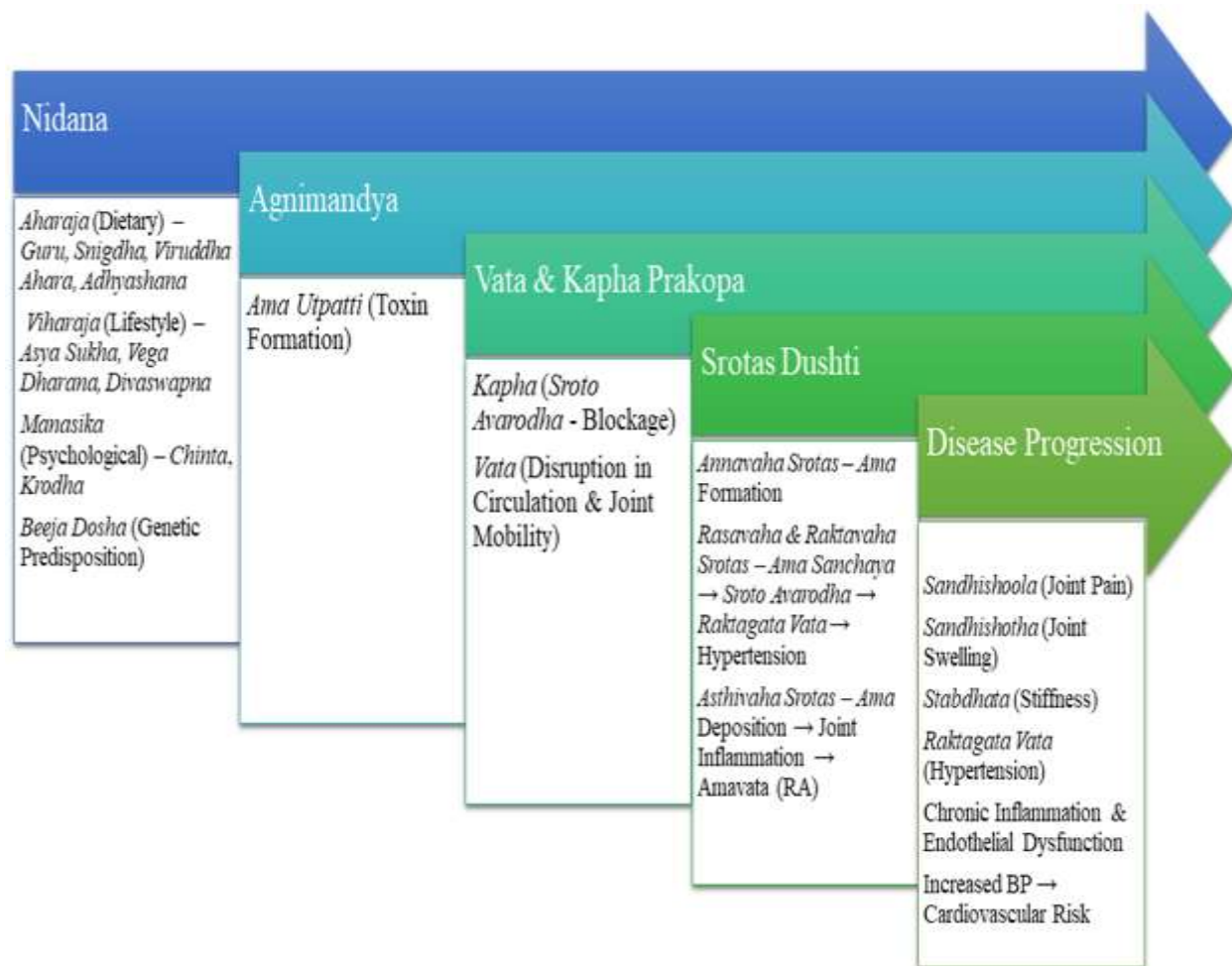
A Rheumatoid arthritis patient with hypertension was the subject of the current investigation, which produced encouraging findings. However, a more thorough assessment is necessary because of the small sample size of just one case. Future studies should use randomized controlled trials and bigger sample sizes to verify the safety, effectiveness, and dependability of the integrated Ayurvedic treatments. These kinds of investigations will be essential for creating standardized therapeutic standards and methods.

Discussion:-

Ayurvedic treatment integration for Rheumatoid arthritis offers a viable substitute for conventional medical methods. This case study describes the application of several Ayurvedic treatments to a 51-year-old woman who has been diagnosed Rheumatoid arthritis with Hypertension.

The patient's symptoms including relief from pain, stiffness and acidity. The vitiation of Agni leads to weak digestion (Agnimandya), resulting in improper breakdown of food. This incomplete digestion causes the formation of Ama (undigested toxins), which then associates with vitiated VataDosha, aggravating its effects. Vata, with its properties of dryness, coldness, and mobility, influences joint tissues (Sandhis) and the cardiovascular system. As Ama and vitiated Vata accumulate in the joints, they cause inflammation (Sandhishoola), swelling (Sandhishotha), stiffness (Stabdhata), and pain, eventually leading to joint destruction. Additionally, Vata's effect on the cardiovascular system constricts blood vessels, and inflammation from Amavata exacerbates systemic inflammation, which, along with cytokines like TNF-alpha, leads to hypertension (RaktachapVridhhi). The chronic inflammatory state worsens, aggravating both Vata and PittaDoshas. As a result, Amavata progresses with systemic complications, including high blood pressure. The ongoing accumulation of Ama causes damage to joints, contributing to arthritis and further systemic issues such as heart disease, metabolic imbalance, and kidney dysfunction. Symptoms include pain, swelling, and stiffness in joints, along with hypertension and other systemic issues like gastritis, acidity, fatigue, and body aches (Angamarda). This entire process is known as the **Samprapti** (pathogenesis) of the condition (Fig 1)^[24].

Fig 1 The samprapti of this case study



During her 9 days IPD, he underwent Panchakarma treatments as part of the Ayurvedic therapy regimen. JanuBasti with Murivenna Tailam involves placing a dough ring around the knee and filling it with 300 ml of lukewarm oil for 30 minutes. This therapy allows deep penetration of the oil, reducing inflammation, relieving pain, and improving circulation, which accelerates tissue healing. JanuLepam uses a paste made from Dashmool, Dashang, Trikatu, and Sonth, applied for 30-45 minutes to soothe inflammation, enhance circulation, and detoxify tissues. NadiSwedan with DashmoolKwath exposes the affected joint to steam, promoting relaxation, reducing swelling, and alleviating pain. PatraPindaSwedan, using heated medicinal leaves, detoxifies the body, balances doshas, and improves joint flexibility.

The Ayurvedic treatment in this case involved a combination of Ayurvedic formulations and Panchakarma therapies aimed at addressing joint pain, inflammation, and mobility issues. Rakt Chap, a blood purification therapy. Go Flexi Capsule and Arthri Capsule provide relief from joint pain and stiffness. AamVaataHarGuggul is specifically designed to balance the aggravated doshas in cases of Aam (toxins) accumulation and Vata disorders, helping to reduce joint pain and inflammation. JS Cal D+ supports bone health by providing essential minerals like calcium and vitamin D, improving bone density and strength. NavakGuggul acts as a powerful anti-inflammatory, reducing pain and swelling, while Orthonil Syrup aids in alleviating pain and improving joint mobility.

Relivon Powder is used to manage pain and stiffness, providing additional support to joint health. 32 Herbal Tea is a blend that detoxifies the body, improves circulation, and supports overall health and well-being. This case study highlights the benefits of combining traditional medical treatments with Ayurvedic therapy for managing Rheumatoid arthritis. Ayurvedic treatments offer a cost-effective approach targeting underlying imbalances, improving overall function, and addressing coexisting conditions like diabetes and hypertension. Further research is needed to confirm their effectiveness and safety in Rheumatoid arthritis management.

Conclusion:-

This case study evaluating the treatment of Rheumatoid arthritis with hypertension through Ayurvedic interventions yields the following findings:

Symptoms: Upon admission, the patient presented with swelling, pain with swelling on both knees, whole body pain, gastritis and acidity. After IPD Ayurvedic treatment and follow up, significant improvements were observed. The patient reported relief from pain, swelling and gastritis with no new symptoms emerging, suggesting a marked improvement in overall health.

Vitals: The patient's vital signs fluctuated during the treatment period. Blood pressure stabilized to 120/80 mmHg from 140/90 mmHg. The patient's weight remained same, and there was a notable reduction in knee pain with swelling, reflecting positive changes in both lifestyle and diet.

Investigations: Laboratory tests conducted during the treatment showed significant improvements in health conditions. Rheumatoid Factor reduced from 31.2 U/ml to 26 U/ml indicating the reduction in Rheumatoid arthritis. Similarly, Anti CCP reduced from 100 U/ml to 45 U/ml. The ESR also reduced from 36 mm/ 1 hr to 22 mm/ 1 hr. These results underscore the potential efficacy of Ayurvedic therapies in managing Rheumatoid arthritis.

The combination of allopathic treatments and Ayurvedic therapies for Rheumatoid arthritis showed positive results, improving lab tests, vital signs, and symptoms. Ayurvedic treatments focus on restoring balance and addressing imbalances, enhancing overall health. Further clinical trials are needed to confirm these findings and establish standardized treatment methods for Rheumatoid arthritis.

Reference:-

1. Rajdan N, Srivastava B, Sharma K. Rheumatoid arthritis: treatments available at present. In: Nanotherapeutics for inflammatory arthritis. CRC Press; p. 243–95.
2. Yang D, Cabling MG. Rheumatoid arthritis. In: Interdisciplinary rheumatology: rheumatology and cardiology. CRC Press; 2024. p. 25–36. <https://doi.org/10.1201/9781003386711-3>
3. Zeliger HI. Chapter 25 - Rheumatoid arthritis. In: Zeliger HI, editor. Oxidative stress. Academic Press; 2023. p. 317–27. doi:10.1016/B978-0-323-91890-9.00008-8
4. Jia G, Guo T, Liu L, He C. Rheumatoid arthritis, circulating inflammatory proteins, and hypertension: a Mendelian randomization study. J Clin Hypertens (Greenwich). 2025 Jan;27(1):e14932. doi:10.1111/jch.14932. Epub 2024 Nov 15. PMID: 39545804.
5. Samson MN, Wells Q, Alexander MR. Rheumatoid arthritis is associated with hypertension in Mendelian randomization analysis. Circulation. 2023 Nov 7;148(Suppl_1):A17794.

6. Hadwen B, Stranges S, Pope JE, Bartlett S, Boire G, Bessette L, Hitchon CA, Hazlewood G, Keystone EC, Schieir O, Thorne C. Risk factors for prevalent and incident hypertension in rheumatoid arthritis: data from the Canadian Early Arthritis Cohort. *Rheumatology Advances in Practice*. 2024 Mar 14;8(2).
7. Mishra A, Mishra S. An integrative approach including Panchakarma and Marma therapy, administered in a spiritual environment, for the management of symptoms associated with rheumatoid arthritis and hypertension - A case study (Case Study 7). 2023 May 21. <https://doi.org/10.31219/osf.io/6pkvc>
8. Rastogi S, Verma A, Trivedi R, Shukla A, Kumar D. Clinical metabolomics investigation of rheumatoid arthritis patients receiving Ayurvedic whole system intervention. *J Ayurveda Integr Med*. 2024 Jul 1;15(4):101009.
9. Nalbant M, Çetin E. Hypertension and insulin resistance in rheumatoid arthritis: unveiling insights with METS-IR index. *Turk J Clin Lab*. 2024 Sep 9;15(3):314–20.
10. Anyfanti P, Xanthopoulou M, Nousiou C, Angeloudi E, Lazaridis A, Michailou O, Dimitroulas T, Kotsis V, Gkaliagkousi E. Assessment of cardiovascular risk in patients with rheumatoid arthritis according to current hypertension guidelines. *J Hypertens*. 2024 May 1;42(Suppl 1):e282.
11. Bharatia R, Gupta N, Upadhyay P, Kumar S. Review on herbal preparations from Ayurveda used to treat rheumatoid arthritis. *Int J Pharma Prof Res*. 2024;15(1):167–72.
12. Basnyat S, Kolasinski SL. Ayurvedic medicine for rheumatoid arthritis. *CurrRheumatol Rep*. 2014 Aug;16:1–6.
13. Chowdhury BR. World's best, the D.I.P. diet. Dr. Biswaroop Roy Chowdhury; 2024.
14. Mishra A, Shrivastava V. Managing an essential public health menace - Osteoarthritis of knee, through JanuBasti procedure of traditional Indian medicine - A pilot study. *J Med Sci Res*. 2020;8(4):150–9. doi: <http://dx.doi.org/10.17727/JMSR.2020/8-20>
15. Varghese V, Shukkoor M, Jose D. Pain relief and functional improvement with Murivenna bandage in osteoarthritis of knee joint - A case report. *Int J AYUSH Case Rep*. 2023 Dec 24;7(4):425–30. <https://www.ijacare.in/index.php/ijacare/article/view/485>
16. Sahu D, Debnath SK, Das D, Barik L, Ekka R, Saha S, Madal TK, Babu G. A clinical case study on JanuSandhivata (knee arthritis) to evaluate the effect of combined Panchakarma procedure and internal traditional Ayurvedic formulations. *Res J Pharm Technol*. 2023;16(12):5901–5. doi:10.52711/0974-360X.2023.00956
17. Nanda GC, Tiwari RK. Shothahara activities of DashamoolaDravyas as an anti-inflammatory formulation with special reference to Charak - A review. *AYUSHDHARA*. 2016;3(1):479–85.
18. Perera P. A comparative study of DashangaLepa and DelipothuPattu (Lepa) in the management of Amavata Sandhi Shotha (rheumatoid arthritis). 2014.
19. Murunikkara V, Rasool M. Trikatu, an herbal compound as immunomodulatory and anti-inflammatory agent in the treatment of rheumatoid arthritis – An experimental study. *Cell Immunol*. 2014 Jan 1;287(1):62–8.
20. Kanashetti DS, Byadgi PS, Tiwari R, Maurya BN, Rana M, Dwivedi VK, Suresh RD, Dwivedi KN. Shunthi (*Zingiberofficinale*Rosc.): A miraculous medicinal plant. *Int J Adv Res Med Chem*. 2021;3(1):8–13.
21. Baheti S, M S. Effect of NadiSweda on symptoms of pain, swelling and stiffness in knee osteoarthritis - An open labeled single arm clinical study. *J Ayurveda Integr Med Sci*. 2023;8(2):14–9. <https://doi.org/10.21760/jaims.8.2.3>
22. Taru P, Syed S, Kute P, Shikalgar M, Kad D, Gadakh A. Dashamoola: a systematic overview. *GIS-Z Geoinf*. 2022;9:1334–45.
23. Bhusal N, et al. Review on PatraPindaSweda: a peculiar Ayurveda bolus fomentation. *IntAyurvedic Med J [Internet]*. 2017 [cited 2017 May]. Available from: http://www.iamj.in/posts/images/upload/1760_1764.pdf
24. Soni S. Hetu and Samprapti of Amavata (rheumatoid arthritis) - A systematic review. PG Department of Rog NidanEvumVikritiVigyan, GAC Raipur (CG), India; 2020 Feb 25 [revised 2020 Mar 15; accepted 2020 Apr 5].