CHAPTER 5

AYURVEDIC PANCHAKARMA

Doctoral Theses

01. ASWATHY (Y. S.)
Effect of Ayurveda Treatment Algorithm in the Management of Rheumatoid Arthritis and its Influence in Gut Microbiota.
Supervisors: Dr. Prasanth Dharmarajan and Prof. Anandaraman P. V
Th 28955

Abstract

Rheumatoid arthritis (RA) is a chronic systemic autoimmune disorder affecting 0.5–1% of the adult population in India. Clinically, RA parallels Amavata in Ayurveda, where vitiated Vata and Ama lead to pain and swelling in joints. Conventional therapies provide symptomatic relief but are limited by adverse effects and incomplete remission. Ayurveda offers individualized, algorithm-based treatment strategies that integrate Langhana, Pachana, Shodhana, and Shamana approaches. Aim: To assess the effect of Ayurveda treatment algorithm in the clinical outcomes of Rheumatoid Arthritis patients and its influence in gut microbiota Methods: This was a prospective, open-label, single-arm interventional study involving 50 RA patients diagnosed by ACR/EULAR 2010 criteria and classical Amavata features. Patients received an Ayurveda treatment algorithm comprising Ama Pachana, Langhana, Snehapana, Virechana, Yoga Basti, and Shamana Aushadha. Subjective and objective parameters were assessed using Amavata Lakshana, Clinical Disease Activity Index (CDAI), Patient Activity Scale (PAS), Disease Activity Score (DAS28), and ACR/EULAR criteria. Laboratory investigations included ESR, CRP, Rheumatoid Factor, and Anti-CCP. Gut microbiome analysis was performed on stool samples (patients and controls) using 16S rRNA sequencing with DADA2/QIIME2 pipelines. Results: Statistically significant improvements were observed in pain, swelling, tenderness, joint mobility, and systemic inflammatory markers (CRP, ESR, RF, ACPA). Disease activity scores (CDAI, PAS, DAS28) decreased markedly post-treatment and during follow-up. Microbiome analysis revealed trends toward enrichment of beneficial taxa (e.g., Faecalibacterium, Agathobacter, Bacteroides) and reduction of pathobionts (Prevotella, Akkermansia, Collinsella), though changes were not statistically significant. Conclusion: The Ayurveda treatment algorithm demonstrated efficacy in reducing inflammation, improving joint function, and enhancing quality of life in RA patients. While microbiome shifts did not reach statistical significance, supportive modulation was evident. The findings highlight the potential of personalized Ayurveda-based approaches in RA management and their relevance to gut microbiota research.

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02. LATIKA

Effect of Shodhana Karma (Vamana Followed by Virechana) in the Management of Psoriasis and its Impact on Immunological and Inflammatory Biomarkers"- An Exploratory Study.

Supervisors: Prof. Anandaraman P. V, And Dr. Prasanth Dharmarajan

Th 28956

Abstract

Psoriasis is a chronic autoimmune skin disorder characterized by inflammation and dysregulated immune responses, reflected by elevated levels of immunological and inflammatory biomarkers . Western biomedicine have limitations due to side effects and incomplete remission. Shodhana karma involving Vamana (therapeutic emesis) followed by Virechana (therapeutic purgation), are traditionally employed to restore Doshic balance and immune modulation . The objective of this study is to evaluate the effect of Shodhana Karma on immunological and inflammatory biomarkers in patients with psoriasis (Kitibha Kushtha). Additionally, the study assesses its impact on clinical signs and symptoms using the Psoriasis Area and Severity Index (PASI) and on patients` quality of life measured by the Dermatology Life Quality Index (DLQI). This single-arm, open-ended clinical trial enrolled 31 psoriasis patients .After screening and consent, patients underwent Rookshana with Aargwadha Patra Kashaya Dhara and oral Panchkola Choorna . This was followed by increasing doses of Snehapana with Indukanta Ghrita. Vamana Karma was induced using Madanphala Pippali Choorna (6 g), Kutaja Beej Choorna (6 g), and Kashayas of Madhuka, Nimba, and Patola (384 ml). Post-Vamana, Samsarjana Karma was administered. Subsequently, a second course of Snehapana was given,Virechana Karma was performed using Triphala, Trivrit, and Danti Kashaya (100 ml), followed by Samsarjana. The intervention significantly reduced PASI, DLQI , and Skindex -29 scores ($p<0.001$), alleviating itching, scaling, and erythema. Biochemical analysis also demonstrated significant reductions in pro-inflammatory cytokines IL-6 , IL-17 , IL-23 , TNF-α , ESR , CRP , uric acid levels, and an increase in anti-inflammatory marker IL-10. Shodhana Karma, employing a sequential Vamana and Virechana protocol, shows promising clinical efficacy and immunomodulatory effects in managing psoriasis. The significant improvement in clinical symptoms and favourable modulation of key immunological and inflammatory biomarkers support its integration as a potential. complementary or alternative therapeutic approach.

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1. Introduction 2 Review of Literature 3. Material and Methodology 4. Observation and Results 5. Discussion 6. Conclusion. 7. Summary 8. References 9. Bibliography. Annexures.