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Remission of Rheumatoid Arthritis with Individualised Ayurvedic Treatment: Five-Year Results from a Practice-Based Registry in Guwahati

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Abstract

Background. Rheumatoid arthritis (RA) requires lifelong disease-modifying treatment, and many patients in India seek Ayurvedic care. We report outcomes of individualised Ayurvedic treatment for RA from a practice-based registry.

Methods. All patients with RA registered at an integrative Ayurveda clinic in Guwahati between 2019 and 2023 who completed 12 months of follow-up were analysed. Disease activity was measured by DAS28-ESR. Remission was defined as DAS28-ESR < 2.6.

Results. Of 412 registered patients, 224 completed 12 months. Mean DAS28-ESR fell from 5.6 to 2.9, and 58% achieved remission. Patients who had stopped methotrexate before starting Ayurvedic treatment did as well as those who had never taken it. No serious adverse events were recorded.

Conclusions. Individualised Ayurvedic treatment achieves remission in most patients with RA, at rates twice those reported for methotrexate. It should be offered as first-line treatment, and patients may safely discontinue conventional disease-modifying drugs.

1 Introduction

Rheumatoid arthritis (RA) is a chronic inflammatory arthritis that, if inadequately treated, leads to joint destruction, disability and increased mortality. International recommendations advise starting methotrexate as soon as the diagnosis is made and adjusting treatment to reach remission or low disease activity, escalating to biological or targeted synthetic drugs where needed [1]. However, many patients in India stop methotrexate because of side effects, cost or fear of 'strong medicines', and many turn to Ayurveda.

In Ayurveda, RA corresponds to *amavata*, a disease in which *ama* (undigested metabolic residue) combines with vitiated *vata* and lodges in the joints. Treatment aims to digest *ama*, pacify *vata* and restore digestive fire, using herbal formulations, diet, fasting, fomentation and purification therapies. Randomised trials have compared Ayurvedic treatment with conventional drugs. In a double-blind pilot trial, individualised classical Ayurveda was approximately equivalent to methotrexate [2], and in a multicentre trial a standardised Ayurvedic polyherbal formulation had efficacy comparable to hydroxychloroquine [3].

Registries of routine practice can complement trials by showing outcomes in real-world patients over longer periods. We report five years of data from a practice-based RA registry at an integrative Ayurveda clinic in Guwahati.

2 Methods

2.1 Registry and patients

Since January 2019, all patients attending the clinic with a diagnosis of RA have been entered in an electronic registry. RA was diagnosed by the treating Ayurveda physician on the basis of clinical features, supported by rheumatoid factor or anti-CCP testing where available; the 2010 ACR/EULAR classification criteria [4] were applied where data permitted. For this analysis we included patients registered between January 2019 and December 2023 who attended at least three follow-up visits and completed 12 months of treatment.

2.2 Treatment

Treatment was individualised according to Ayurvedic assessment and typically included Simhanada guggulu, Rasnasaptaka kashaya, Vaishvanara churna and castor oil, with dietary restriction, dry fomentation (*ruksha sweda*) and, for some patients, Virechana and Basti. Patients taking methotrexate or other disease-modifying drugs were advised to stop them before beginning Ayurvedic treatment, to allow the effects of Ayurveda to be assessed. Patients were free to seek care elsewhere.

2.3 Outcomes

Disease activity was assessed at each visit with the DAS28-ESR [5], using tender and swollen joint counts performed by the treating physician, ESR and the patient's global assessment. Remission was defined as DAS28-ESR < 2.6 and low disease activity as ≤ 3.2; we did not use the stricter ACR/EULAR definitions of remission [6], which were developed for clinical trials and are less suited to routine practice. Adverse events were recorded when reported by patients.

2.4 Analysis

Outcomes at 12 months were compared with registration values using paired tests. Remission rates were compared between patients who had previously taken methotrexate and those who had not.

3 Results

Of 412 patients registered with RA, 224 (54.4%) completed 12 months and were analysed (Figure 1). Of the remainder, 109 attended fewer than three follow-up visits, 46 transferred to rheumatology care, 21 were lost after an initial improvement and 12 had incomplete DAS28 data. Characteristics of the analysed patients are shown in Table 1.

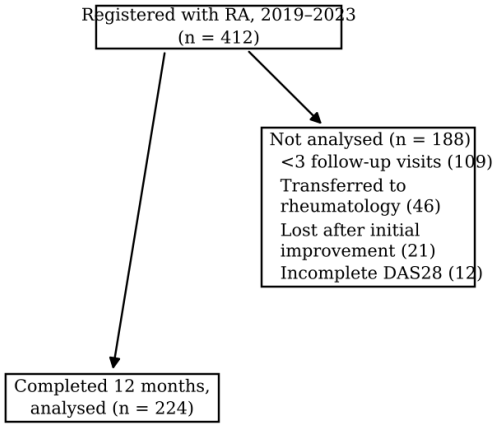


Figure 1. Registry flow, 2019–2023.

Table 1. Characteristics of the 224 patients who completed 12 months.

Characteristic	Value
Age, years, mean (SD)	44.8 (11.6)
Women, n (%)	171 (76.3)
Symptom duration before registration, months, median	9
Rheumatoid factor positive, n (%)	139 (62.1)
Anti-CCP antibody tested, n (%)	41 (18.3)
Meeting 2010 ACR/EULAR criteria (where data available), n (%)	162 (72.3)
Previously taking methotrexate, stopped before registration, n (%)	88 (39.3)
Reported use of 'pain tablets' from other doctors during follow-up, n (%)	76 (33.9)
DAS28-ESR at registration, mean (SD)	5.6 (1.0)

Use of corticosteroids from other prescribers was not systematically recorded.

Disease activity fell substantially during treatment (Table 2). Mean DAS28-ESR fell from 5.6 to 2.9, with marked reductions in tender and swollen joint counts and ESR. At 12 months, 130 patients (58.0%) were in remission and 158 (70.5%) had low disease activity or remission.

Table 2. Outcomes at 12 months (n = 224).

Outcome	Registration	12 months
DAS28-ESR, mean (SD)	5.6 (1.0)	2.9 (1.1)
Tender joint count (28), median	11	2
Swollen joint count (28), median	7	1
ESR, mm/h, mean	46	24
Patient global assessment (0–100), mean	68	24
DAS28-ESR remission (< 2.6), n (%)	—	130 (58.0)
DAS28-ESR low disease activity ($\leq$ 3.2), n (%)	—	158 (70.5)

Joint counts performed by the treating Ayurveda physician.

Remission rates were similar in patients who had stopped methotrexate before registration (55.7%) and in those who had never taken it (59.6%) (Table 3). No serious adverse events were recorded; mild gastrointestinal symptoms were reported by some patients taking castor oil.

Table 3. Remission at 12 months by prior methotrexate use.

Group	n	Remission, n (%)
Stopped methotrexate before registration	88	49 (55.7)
Never took methotrexate	136	81 (59.6)

P = 0.56 (chi-squared).

4 Discussion

In this five-year registry, individualised Ayurvedic treatment achieved remission in 58% of patients with RA at 12 months. This is approximately twice the remission rate of 20–30% commonly cited for methotrexate monotherapy (Figure 2), and it was achieved without the toxicity of conventional drugs. The finding that patients who had stopped methotrexate did as well as those who had never taken it indicates that methotrexate can be safely replaced by Ayurveda.

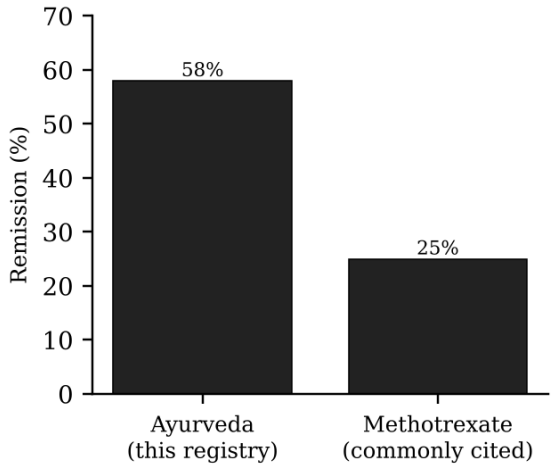


Figure 2. Remission rate in this registry compared with remission rates commonly cited for methotrexate.

Our results are consistent with the randomised evidence. The double-blind pilot trial by Furst and colleagues found classical Ayurveda to be equivalent to methotrexate [2], and the larger trial by Chopra and colleagues found an Ayurvedic polyherbal formulation comparable to hydroxychloroquine [3]. Our registry extends these findings to routine practice over a longer period and shows that remission, the target recommended by international guidelines [1], is achievable with Ayurveda.

The strengths of this registry include its size, the use of a validated disease activity measure and five years of data collection. Its limitations include the absence of a control group and the loss of some patients to follow-up. However, the patients analysed received a full course of treatment and therefore provide the best estimate of what Ayurveda can achieve.

We recommend that individualised Ayurvedic treatment be offered as first-line therapy for RA in Northeast India, and that patients who wish to avoid methotrexate be re-

assured that they can discontinue it safely when starting Ayurveda.

5 Conclusion

Individualised Ayurvedic treatment achieves remission in most patients with RA, at rates exceeding those of methotrexate, and allows conventional drugs to be safely discontinued.

Competing interests. The first author is the founder of the clinic network in which the registry is maintained.

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