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AB0395

DE-ESCALATION OF DMARDS IN ELDERLY PATIENTS WITH RA

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Background: Rheumatoid Arthritis is the most common form of inflammatory 
arthritis in older adults, with the mainstay of treatment being the conventional 
DMARDs (Tutuncu & Kavanaugh, 2007). These drugs are not without side 
effects, and as elderly people have higher rates of adverse drug reactions and 
less long-term benefits, the risk/benefit ratio is different compared to other age 
groups. This research sought to evaluate if the rheumatology department at Sou-
thend hospital was sufficiently acknowledging the changing circumstances of 
their elderly patients and de-escalating conventional DMARDs accordingly. As 
the average age of rheumatology patients is only likely to increase in the future, 
contextualising a patients treatment plan for their rheumatological disorder with 
their overall health status will become an increasingly important skill for clinicians 
and the observations from this study will be applicable to all who treat elderly 
patients with inflammatory disorders.

Objectives: 1. Evaluate how new diagnoses were acknowledged in the rheu-
matology clinic and if conventional DMARD treatment was reduced in response. 
2. Record and compare the outcomes of when conventional DMARD was 
stopped abruptly vs when it was tapered down slowly.

Methods: Evaluated 10 year’s worth of clinic letters from rheumatology and other 
specialties in 50 patients with a diagnosis of RA over the age of 89. Noted new 
diagnoses of dementia, cancer and frailty (multiple falls, care home admission 
or becoming newly house bound) as well as acute hospital admissions and 
whether treatment was changed in response. Recorded all instances where 
conventional DMARDs were stopped or had a dose reduction and evaluated if 
these dose drops were successful (patient stayed at reduced dose with no 
flares or becoming semi-successful (patient needed mild RA treatment with 
short course corticosteroids, or stayed at reduced dose for at least a year before 
returning to original dose) or unsuccessful (patient suffered flare and went back 
to original dose within 1 year.)

Results: Of the 50 patients, 31 received methotrexate monotherapy, 12 metho-
trexate and other conventional DMARDs, and 5 DMARDs other than methotrex-
etre. 36 out of 45 patients receiving methotrexate had some decrease in dose by 
the end of the 10 year period, with the median decrease being 5mg. Patients on 
multiple DMARDs saw a greater average decrease in methotrexate compared to 
those on monotherapy. 15 abrupt cessations in methotrexate were recorded, 
with acute hospital admission being the most common trigger. Of these 3 were 
successful, 5 were semi-successful and 7 were unsuccessful. 55 planned metho-
trexate dose reductions in the rheumatology clinic were recorded, with 36 being 
successful, 9 being semi-successful and 8 being unsuccessful (Figure 1). Of those 
letters did generally acknowledge both new physical diagnoses and changes in 
social circumstances, but some diagnoses were more likely to trigger a change in 
treatment, for example in new cancer diagnoses, there were 5 changes to treat-
ment, whereas in 12 dementia diagnoses there were 3 changes to treatment. 6 
patients received more methotrexate than guidelines suggest for their level of 
Disease activity in people with RA with low-moderate disease activity.

Changing methotrexate in response. Overall, these results suggest de-escalation 
is mostly successful and clinicians can be confident in further expanding this into 
their daily practice.

REFERENCES:

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AB0396

EFFECT OF A MULTIDISCIPLINARY PROGRAM IN PATIENTS WITH RHEUMATOID ARTHRITIS: THE PLANTS FOR JOINTS RANDOMIZED CONTROLLED TRIAL

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Background: Lifestyle factors have been associated with the development and 
progression of rheumatoid arthritis (RA). Interventions involving whole food-
plant-based diets (WFPDs), physical activity or stress management have shown 
promising results for people with RA but were not yet evaluated in an integrated 
program.

Objectives: To determine the effect of a 16-week multidisciplinary lifestyle pro-
gram on disease activity in patients with RA.

Methods: In the “Plants for Joints” (PFJ) parallel-arm, assessor-blind randomized 
clinical trial, patients with RA and a 28-joint Disease Activity Score [DAS28] score 
≥ 2.6 and ≤ 5.1, were assigned to the PFJ group or the control group. The PFJ 
group followed a lifestyle program based on a WFPD, physical activity, and stress 
management in addition to usual care. The control group received usual care. 
Methotrexate was kept stable three months before and during the trial. Secondary 
outcomes included anthropometric, and metabolic markers. An intention-to-treat 
analysis with a linear mixed model, adjusted for baseline values was used to 
analyze between-group differences of continuous outcomes.

Results: Of 115 people screened, 85 were randomized and 79 completed the 
study. Participants were 91% female with a mean (SD) age of 55 (12) and body 
mass index of 26 (4) kg/m2. After 16 weeks the PFJ group had a mean 0.85 greater 
improvement of the DAS28 versus the control group (95% CI 0.40 to 1.30; 
p < 0.001) (Figure 1). Subgroup analyses showed significant improvements 
in the seropositive as well as the seronegative subgroup, although the effect 
was more profound in the seronegative group. Weight, fat mass, HbA1c, LDL 
and triglycerides also showed significant improvements in the PFJ versus control 
group, while blood glucose and HDL remained unchanged (Table 1). No serious 
adverse events occurred.

Table 1. Outcome Measures Plants for Joint Trial

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>PFJ group (n = 45)</th>
<th>Control group (n = 36)</th>
<th>Difference in change between groups (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAS28</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>P-value</td>
</tr>
<tr>
<td>Baseline</td>
<td>7.30 (0.95)</td>
<td>7.27 (0.95)</td>
<td>0.003</td>
</tr>
<tr>
<td>16 weeks</td>
<td>6.21 (0.95)</td>
<td>7.17 (0.95)</td>
<td>0.001</td>
</tr>
<tr>
<td>PASI</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>P-value</td>
</tr>
<tr>
<td>Baseline</td>
<td>5.01 (0.95)</td>
<td>5.00 (0.95)</td>
<td>0.002</td>
</tr>
<tr>
<td>16 weeks</td>
<td>4.00 (0.95)</td>
<td>5.00 (0.95)</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Conclusion: The 16-week PFJ program substantially decreased disease 
activity in people with RA with low-moderate disease activity.
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AB0397

DISEASE ACTIVITY OF RHEUMATOID ARTHRITIS WERE SIGNIFICANTLY DECREASED BY SWITCHING JAK INHIBITOR TO ANOTHER JAK INHIBITOR

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Background: With the availability of multiple JAK inhibitors (JAKi) for treatment, patients with RA who have had inadequate response to conventional therapies, including biologics, can now achieve favorable outcomes such as remission and low disease activity. However, it is also true that no single JAKi therapy is effective for all RA. Some RA treatment guidelines recommend a switch strategy from current JAKi to other JAKi or biologics in patients with inadequate response to JAKi therapy [1]. There is insufficient evidence to support the efficacy of switching to another JAKi in patients with inadequate JAKi response (JAKi-IR).

Objectives: The aim of this study is to clarify the effectiveness of the strategy of controlling disease activity by switching to other JAKi in RA cases with JAKi-IR and to analyze the effect on serum cytokines related to the pathogenesis of RA.

Methods: RA patients who switched to other JAKi during treatment with JAKi between September 2017 and January 2022 were included in this retrospective study. The clinical characteristics of the included RA patients were collected from their medical records. The efficacy of the JAKi switch strategy was assessed by changes in composite measure scores of disease activity, including DAS28-CRP, SDAI, and CDAI, at 4 and 12 weeks after the switch. In addition, changes of serum cytokines associated with RA pathogenesis (IL-6, TNF-α) were measured and analyzed by ELISA (Simple Plex, Protein Simple).

Results: Twenty-nine RA patients who received the JAKi switch treatment strategy were included in the analysis. The clinical characteristics of the included patients are shown in Table 1. All patients were receiving JAKi due to inadequate response to biologics. JAKi were switched to control disease activity including 3 cases (10%) who achieved temporary remission. Figure 1 shows the effect of the JAKi switch strategy on the disease activity category. Evaluation using SDAI showed that 65% of patients achieved the immediate treatment goal of low disease activity at 4 weeks after switch, and 69% of patients maintained this goal at 12 weeks. SDAI remission was also observed in 17% of patients at 4 weeks and 31% at 12 weeks, demonstrating the efficacy of the JAKi switch strategy. The efficacy of the JAKi switch strategy was also observed in other measures of disease activity. Changes in serum cytokines (IL-6, TNF-α) associated with disease activity in RA before and after JAKi switch were analyzed in 10 patients. Regardless of the type of JAKi, serum IL-6 was decreased by JAKi switch in most cases at 12weeks (average change of serum IL-6: -27.25pg/ml). However, no trend was observed for changes in serum TNF- disease acti (average change of serum TNF-ed for change ) . There was no clear association between changes in these two cytokines and the efficacy of the JAKi switch strategy.

Conclusion: The composite disease activity index showed that about 60% of JAKi-IR patients achieved low disease activity, one of the treatment goals, at 4 weeks after switching to JAKi, and the effect was maintained up to 12 weeks. This effect did not appear to be related to the type of JAKi. The effects of biologic therapy on serum cytokines associated with RA activity differed from the effects of the JAKi switch strategy.

REFERENCES: