p<0.01), CRP (r=0.33, p<0.01) at baseline, ΔMMP3 (r=0.30, p<0.02), and ΔHAQ (r=0.25, p=0.04) on univariate analysis. Multivariate analysis identified no independent factors (Table 1).

**Table 1. Risk factors for developing sarcopenia in patients with rheumatoid arthritis**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Univariate</th>
<th>Multivariate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R value</td>
<td>p value</td>
</tr>
<tr>
<td>Male sex</td>
<td>0.28</td>
<td>0.02</td>
</tr>
<tr>
<td>Age</td>
<td>0.27</td>
<td>0.03</td>
</tr>
<tr>
<td>GC use &gt;5mg/day</td>
<td>0.33</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>ΔMMP3</td>
<td>0.30</td>
<td>0.02</td>
</tr>
<tr>
<td>ΔHAQ</td>
<td>0.25</td>
<td>0.04</td>
</tr>
</tbody>
</table>

GC: glucocorticoids, CI: confidence interval, Δ: change from baseline to 2 year

**Conclusion:** Male sex, old age, glucocorticoid use >5 mg/day, and high elevations of MMP3 and HAQ are associated with developing sarcopenia at 2 years in RA patients.

**REFERENCES:**


**Acknowledgement:** Yutaro Yamada

**Disclosure of Interests:** Yutaro Yamada Speakers bureau: Abbvie, Chugai, Mitsubishi Tanabe, Masahiro Tada Speakers bureau: Abbvie, Astellas Pharma, Bristol-Myers Squibb, Chugui Pharmaceutical, Eisai, Janssen Pharmaceutical, Mitsubishi Tanabe Pharma Corporation, Ono Pharmaceutical, Pfizer Japan, Takeda Pharmaceutical.


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**THU0161 FEATURES OF LIPID PROFILE INDICATORS IN PATIENTS WITH RHEUMATOID ARTHRITIS IN CONNECTION WITH ARTERIAL HYPERTENSION**

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**Background:** Patients with rheumatoid arthritis (RA) have an early development of endothelial dysfunction, an increase of the atherogenic index (AI), and a high risk of fatal cardiovascular events. The presence of arterial hypertension (AH) in patients with RA accelerates the process of early atherogenesis and increases the risk of fatal cardiovascular events.

**Objectives:** To evaluate the dynamics of lipid profile changes in patients with RA in combination with AH.

**Methods:** It was examined 47 patients with RA in combination with AH (by all patients was discovered listag/2degree of AH). The age of the patients ranged from 18 to 72 years. Among the surveyed group dominated men (41 patients). All patients were assessed for the levels of total cholesterol (TC), low density lipoprotein (LDL), very low density lipoprotein (VLDL), triglycerides (TG), high density lipoprotein (HDL), AI (AI = TC – HDL/LDL), antibodies to modified citrulline vimentin (anti-MCV), rheumatoid factor (RF), C-reactive protein (CRP) before treatment. All patients were also assessed for the risk of death for 10 years by the SCORE scale (>15% - very high risk, 10-14% high, 5-13% moderate, <1% - low) and RA activity by DAS28 score.

**Results:** Due to the obtained data, it can be asserted, that in patients with seronegative RA the moderate risk by SCORE was prevalent, and among seropositive RA patients – high risk. The high level of anti-MCV titres was directly correlated with the risk of death by SCORE (p < 0.05, r = 0.64). We found that patients with RA and AH had relatively low levels of TC (5.82 ± 2.21 mmol/L) and LDL (2.82 ± 0.81 mmol/L), but the AI in these patients was 4.42 ± 0.68. It was measured the correlation between the levels of LDL and the activity of the inflammatory process DAS28, the level of CRP and the duration of RA (r = 0.56, p <0.05, r = 0.49, p <0.05, r = 0.53, p <0.05, respectively). There was also a reverse correlation between the duration of RA and the level of HDL (r = -0.47; p <0.05).

**Conclusion:** 1. Seropositivity, high activity and anamnesis of RA for more than 10 years are the factors, that are associated with high risk of fatal cardiovascular events. 2. In patients with RA in combination with AH, serum lipid levels have paradoxical ratio, resulting in lower levels of TC and LDL associated with an increased risk of cardiovascular events (“lipid paradox”). 3. The presence of high anti-MCV titres serves as a prognostically unfavorable feature of the course of RA and AH, since its association with a high risk of fatal cardiovascular events.

**Disclosure of Interests:** None declared


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**THU0161 ORAL VERSUS SUBCUTANEOUS METHOTREXATE IN RECENTLY DIAGNOSED RHEUMATOID ARTHRITIS: DO WE GET THE SAME RESULTS?**

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**Background:** As we know, the use of disease modifying antirheumatic drugs (DMARDs) improves the overall prognosis of rheumatoid arthritis (RA) specially when treatment is started early in the course of the disease. The most widely used DMARD is methotrexate (MTX) mainly because of its favorable efficacy-toxicity ratio. However, there is a lot of variability using MTX when it comes to dosage and route of administration; and little research on the overall response of patients to the different strategies used.

**Objectives:** To compare the clinical response of oral (PO) versus subcutaneous (SC) MTX in recently diagnosed RA patients with no previous use of DMARDs. We evaluated the data collected at baseline, the 3rd, 6th and 12th month after the beginning of MTX treatment.

**Methods:** This descriptive, observational, longitudinal retrospective study was achieved using a cohort of patients with recently diagnosed RA in which treatment with MTX was started between August 1st 2015 to September 1st 2018. We collected demographic and clinical data, disease activity markers, MTX and corticoid dosage, routes of administration and treatment changes.

**Results:** In total, 52 patients were included of which 39 (75%) were women, with an average age of 57.56 years. There was a mean of 28 weeks between the first symptoms and the beginning of MTX.

**Abstract THU0161 – Table 1.**

<table>
<thead>
<tr>
<th>Type of MTX</th>
<th>Total</th>
<th>Oral</th>
<th>Subcutaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients n (%)</td>
<td>52 (100)</td>
<td>25 (48.1)</td>
<td>27 (51.9)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTX dose (mg)</td>
<td>12 (4-13)</td>
<td>11 (3.5-13)</td>
<td>13 (9.6-13)</td>
</tr>
<tr>
<td>Prednisone dose (mg)</td>
<td>6.2 (1-13.2)</td>
<td>5.9 (1-11.1)</td>
<td>6.4 (5-9)</td>
</tr>
<tr>
<td>MTX by joint count</td>
<td>5.8 (4-7.1)</td>
<td>5.8 (4.1-7.1)</td>
<td>6.4 (5.7-7.1)</td>
</tr>
<tr>
<td>MTX by joint count</td>
<td>3.3 (4-6)</td>
<td>3.0 (4-6)</td>
<td>3.5 (4-6)</td>
</tr>
<tr>
<td>MTX by joint count</td>
<td>1.6 (1-3)</td>
<td>1.5 (1-3)</td>
<td>1.7 (1-3)</td>
</tr>
</tbody>
</table>

**Figure 1**

**Abstract THU0161 – Figure 1**

**Rheumatoid arthritis - non biologic treatment**
In the PO MTX group, 8 (32%) patients required a change to SC MTX; in 87.5% of cases due to treatment inefficacy and 7 (87.5%) of these patients kept the SC route until the end of the study.

Out of the patients that began with SC MTX, the one that changed route to PO maintained a good response. All the patients with biologic DMARDs kept the SC MTX as adjuvant therapy. On the other hand, the 3 (12%) patients of the PO that used a biologic DMARD had suspended MTX several months before.

Both groups had a good response to MTX. There was a significant reduction in corticoid requirements during the first year of treatment/PO route.

At the end of the study, 21 (41%) patients received SC MTX and the number goes up to 25 (49%) if we include those who also had biologic DMARDs. Of those who suspended MTX, 85% were due to adverse effects, similar in both groups.

Conclusion:
- Our study suggests that patients that start with PO MTX require route administration changes more frequently than the SC group during the first year of follow-up.
- SC MTX was the route used by almost half the patients by the end of the study.
- We can also see that the inflammatory response to MTX was acceptable regardless of administration route and that corticoids could be reduced significantly in both groups.

REFERENCES

Disclosure of Interests: None declared

THU0162 WHICH PERSISTENCE OF METHOTREXATE AFTER INITIATION OF THE 1ST BDMARD IN RHEUMATOID ARTHRITIS? THE RETRO-RIC2 STUDY

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Background: ACR and EULAR guidelines recommend to prescribe bDMARDs and particularly TNFi in combination with methotrexate (MTX). However, the MTX observence in RA is poor, mainly due to side effect and some bDMARDs (IL6 receptor antagonist) are almost as effective in monotherapy.

Objectives: to evaluate MTX use (dosage, route of administration…) in RA after initiation of the first bDMARD.

Methods: RETRO-RIC2 is a multicentric retrospective study. Were included all patients with RA under MTX therapy at the initiation of the 1st bDMARD from October 2008 to September 2016. The main criteria is the persistence of MTX after 1 and 2 years.

Results: 409 patients were included : mean age = 58.9 years, female 69%, RF positive 76% and ACPA positive 83%, mean RA duration = 13.14y and mean DAS28-ES=4.48. The mean duration of previous MTX therapy = 32 months (mean dose = 16.2mg/w). At the inclusion MTX was administrated by oral route in 52% and subcutaneous in 48%. The first bDMARD was a TNF inhibitor in 70%.

At inclusion, 1.2% of the patients switch from oral route MTX for subcutaneous; inversely in only 0.2% the SC route was switched for oral administration. The results are presented in table 1 and Figure 1.

<table>
<thead>
<tr>
<th>MTX dose</th>
<th>MTX dose</th>
<th>MTX dose</th>
<th>MTX dose</th>
<th>MTX stopped</th>
</tr>
</thead>
<tbody>
<tr>
<td>unchanged</td>
<td>reduction</td>
<td>increase</td>
<td>unchanged</td>
<td>stopped</td>
</tr>
<tr>
<td>V-1/1</td>
<td>404</td>
<td>4.5%</td>
<td>2.7%</td>
<td>93%</td>
</tr>
<tr>
<td>M0-M4</td>
<td>255</td>
<td>14.1%</td>
<td>6.3%</td>
<td>79%</td>
</tr>
<tr>
<td>M4-M12</td>
<td>173</td>
<td>16.8%</td>
<td>5.4%</td>
<td>77%</td>
</tr>
<tr>
<td>M12-M24</td>
<td>159</td>
<td>14.5%</td>
<td>4.4%</td>
<td>80%</td>
</tr>
</tbody>
</table>

V-1 = last previous visit before inclusion

Conclusion: In almost all patients MTX dose and route of administration are unchanged at the initiation of the first bDMARD in RA. With a 2 years follow up 49.9% of MTX dose were reduced and MTX was stopped in 2.9%. At 2 years MTX route of administration is oral for 64% of the patients and s/c for 36%.

Acknowledgement: None declared.

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354 Thursday, 13 June 2019