regression to estimate the risk of loosening with increasing SDAI, stratified for TKA and THA.

Results: Data of 49 RA patients and 88 OA patients were available for analysis. The rate of APL was 36.7% in the RA and 13.6% in the OA group ($p=0.002$). This was explained by a much higher rate of APL in the TKA group (RA: 34.4%; OA: 6.5%; $p=0.001$), while the rates in the THA group were only numerically different (RA: 41.2%; OA: 30.8%; $p=0.528$).

In the RA group one year time integrated SDAI was significantly higher prior to loosening than in controls without loosening ($p=0.043$). In the Cox model, SDAI was also significantly related to time to APL with a Hazard ratio of 1.125 (95% CI 1.021–1.241) ($p=0.018$). Figure 1 depicts cox regression adjusted for AUC SDAI 3, 13 and 26 separately for TKA and THA.

Conclusions: RA is not only a risk factor for infectious complications after TJA, but also for APL after THA or TKA. This effect might—at least partly—be explained by systemic and local inflammation in RA patients as depicted by higher levels of disease activity in RA patients with APL. In the context of treatment-to-target of RA, the presence of an arthroplasty should be considered as an indication for even more stringent control of disease activity.

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Rheumatoid arthritis – comorbidity and clinical aspects

FRI0052 HIGHER URIC ACID IS ASSOCIATED WITH A LOWER DISEASE ACTIVITY IN RHEUMATOID ARTHRITIS PATIENTS

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Background: An association between serum uric acid (UA) and disease activity in rheumatoid arthritis (RA) patients has not been well studied.

Objectives: We describe RA patients with high and normal UA and study its association with RA activity.

Methods: Adult RA patients from The Kuwait Registry for Rheumatic Diseases (KRRD) who satisfied the ACR classification criteria for RA from four major hospitals were studied from February 2013 through April 2017. Patients with recorded

UA were identified. Visits with documented UA levels were included. UA of ≥ 357 $\mu\text{mol/L}$ (6 mg/dL) was considered high. Statistical correlations were made.

Results: A total of 564 RA patients with 2710 hospital visits and available UA were identified, 353 (62.6%) females. Mean age 50.8 ± 11.5 years and disease duration 10.5 ± 2.9 years. Mean DAS28 was 2.9 ± 1.2 and mean HAQ-DI 0.77 ± 0.67 . Rheumatoid factor (RF) was positive in 431/564 (76.4%) and anti-cyclic citrullinated peptide antibodies (ACPA) in 374/564 (66.3%).

Mean UA was 271 ± 78 $\mu\text{mol/L}$ with 12.7% readings being high. There were more males among patients with high UA than with normal UA (56% vs 36%, $p<0.01$) with no difference in age.

UA was negatively correlated with DAS28 ($p<0.001$), CDAI ($p<0.001$), SDAI ($p=0.038$), ESR ($p=0.034$), VAS pain ($p=0.049$), morning stiffness ($p=0.033$), patient's global assessment ($p=0.006$), physician's global assessment ($p=0.033$), number of tender joints ($p<0.001$) and number of swollen joints ($p<0.001$). There was no significant correlation with RF, ACPA or HAQ. The use of steroid, synthetic and biologic antirheumatic drugs, either individually or as a class, was similar among patients with high and normal UA.

Conclusions: RA patients with a higher UA had a lower disease activity despite using similar antirheumatic drugs. Reasons behind such association need to be further studied.

Disclosure of Interest: None declared

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FRI0053 THE CHANGING FACE OF RHEUMATOID ARTHRITIS AT THE END OF THE 20TH CENTURY – A COMPARATIVE POSTMORTEM CLINICOPATHOLOGIC STUDY OF 237 RHEUMATOID ARTHRITIS PATIENTS WITH AA AMYLOIDOSIS AND SYSTEMIC VASCULITIS

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Objectives: Most clinicians accept that the course of rheumatoid arthritis (RA) has changed in the last decades. The aim of this study was to verify this clinical impression characterised by systemic vasculitis (SV) and AA amyloidosis (AAa).

Methods: At the National Institute of Rheumatology 12 138 patients died between 1969 and 2000; among them 237 with RA, who were autopsied.

RA was complicated in 53 (22.36%) by SV, and in 49 (20.68%) of 237 patients by AAa. RA was confirmed clinically according to the criteria of the American College of Rheumatology.¹ The presence of SV and of AAa was determined histologically. The "severity" of vasculitis and the extent of amyloid A deposition/patient was evaluated by semi-quantitative visual estimation on a 0 to 3 plus scale.² The average prevalence of SV and AAa was calculated in percentage of the number of RA patients, who died during four periods of time (8–8–8–8 years) covering 32 years (between 1969 and 2000).

Results: During these four periods of time (from 1969 to 2000) the average age of RA patients with SV continuously increased from 57.00 to 68.00 years, and with AAa from 56.71 to 64.08 years. The prevalence of SV and AAa and the proportion of severe cases in % of RA patients are demonstrated on figure 1.

Conclusions: According to our data RA became more aggressive with higher prevalence of SV and AAa at the end of the last century.

The longer life spans (longer duration of the immune processes) with repeated exacerbations of vasculitis may have contributed to the increased prevalence of SV at death. The increased prevalence of SV (including fourfold mild and double severe cases) in 32 years supports the changing face of RA.

The increased prevalence of AAa may be related to the longer duration of the inflammation as well. The changing trend (inverse proportion) of severe and mild amyloid deposition, i.e. the increase of mild and decrease of severe cases could likely have been related to the introduction of more effective immunosuppressive therapy.

The longer disease duration and later death of RA patients with SV or AAa point to more effective therapy.

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FRI0054 RISK FACTORS FOR POSTPARTUM FLARE IN RHEUMATOID ARTHRITIS – A ROMANIAN COHORT

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Background: Patients diagnosed with rheumatoid arthritis (RA) before pregnancy may experience a postpartum flare. This event may occur independently of the patient treatment, according to recent guidelines.¹

Objectives: The aim of this study was to identify possible risk factors of postpartum RA flares.

Methods: We analysed pregnant RA patients treated with b DMARDs pre-conception/during pregnancy which delivered children. Data analysis was performed in a combined manner: prospectively and retrospectively. Data collection was focused on 5 distinct periods of time: pre-conception, 1 st, 2nd, 3rd pregnancy trimesters, postpartum period before 12 weeks and after 12 weeks. Following parameters were analysed: demographic data (type of pregnancy- planned/unplanned), immunology (RF and ACPA positivity), disease activity score DAS-CRP,² type of medication and duration. Subfertility status and postpartum flares were registered. The retrospective analysis was represented by interview collected data. Flare was defined as early (<12 weeks postpartum) or late >12 weeks)

Results: Among 96 pregnant patients, 54 (56%) patients delivered 57 children. Out of 54 patients, 17 (31.5%) were analysed prospectively and 37, 68.5% retrospectively. The patients were exposed to 3 types of b DMARDs: TNF blockers,⁹ Rituximab⁵ and Tocilizumab.¹ Rituximab was stopped before pregnancy in 4 out of 5 patients (1 continued therapy during the 1 st trimester- unplanned pregnancy) and all presented a postpartum flare. Out of 9 patients with TNF blocker therapy, 2 of them stopped the drug before pregnancy and the other 7 used the medication until pregnancy test positivity or until the end of the 2nd trimester. In this group, 6 of 9 patients presented a postpartum flare. One patient was treated with Tocilizumab before pregnancy and experienced an early flare. table 1 presents the analysis of a set of collected parameters. Overall, the majority of the patients (77.8%) experienced a postpartum flare. An early postpartum flare was identified in 53.7% and late one in 24.1%, with a mean value of 11.59±9.45 weeks. The prospective group experienced more frequently an early flare in comparison to group 2 (0.244 (95% CI 0.62–0.965) but without statistic significance. A positive correlation was found between active disease during the 2nd and 3rd trimester and postpartum early flare occurrence (p=0.044). No correlation was found between postpartum flare, fertility status or therapy type and duration.

Table 1. Risk factors for early postpartum RA flare

Variable	Early flare	p
Prospective	87%	0.044
Planned pregnancy	55%	0.534
Active disease during third trimester	100%	0.044
Active disease during second trimester	87.5%	0.044
Active disease during first trimester	77.8%	0.117
Active disease during preconception	73.8%	0.629
Subfertility	44.4%	0.371
Seropositivity	87%	0.593

Conclusions: RA pregnant patients treated with b DMARDs experience a postpartum flare in the majority of the cases. Persistent active disease during the second and third trimester was identified as a risk factor for postpartum disease flare. Larger prospective studies are needed in order to make a better analysis of all evaluated parameters.

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FRI0055 SAFETY OF ETANERCEPT IN ELDERLY PATIENTS WITH RHEUMATOID ARTHRITIS: A POOLED ANALYSIS

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Background: Both ageing and rheumatoid arthritis (RA) are associated with a higher risk of comorbidities, some of which may be increased by current therapies. However, failure to control RA can lead to a particularly rapid loss of function and independence in the elderly population.

Objectives: To assess the safety of etanercept (ETN) in older (aged >65 years) vs younger (aged ≤65 years) patients with RA.

Methods: Patient-level data were pooled from the double-blind, placebo (PBO)-controlled phases of all completed, randomised, Pfizer- or Amgen-sponsored ETN studies in patients with RA. The occurrence of adverse events (AEs) in PBO- and ETN-treated patients was analysed by age (≤65 years vs >65 years), using the exact Poisson method to calculate 95% confidence intervals (CI). Fisher's Exact tests and Breslow Day tests for interaction were used to assess statistical differences.

Results: Data on 6418 patients were collected from 19 studies (≤65 years: PBO, n=1910; ETN, n=3497; >65 years: PBO, n=364; ETN, n=647). In PBO-treated patients, the occurrence of congestive heart failure (CHF), interstitial lung disease (ILD), and angioedema was significantly higher in older than younger patients (CHF and ILD: figure 1; angioedema: 0.82%, 95% CI 0.17–2.41% and 0%, 95% CI 0–0.19, respectively, p<0.0001). In patients treated with ETN, the occurrence of CHF, serious infections (SI), and non-melanoma skin cancers (NMSC) was significantly higher in older than younger patients (all p<0.0001, figure 1), as was the occurrence of anaphylactic reactions (p=0.02), central nervous system and peripheral demyelinating events (both p=0.001), and seizures (p=0.02). In contrast, the occurrence of non-serious infections and injection site reactions (ISRs) was significantly lower in older than younger ETN-treated patients (infections: 43.12%, 95% CI 38.21–48.49% and 48.27%, 95% CI 45.99–50.63,