achieve PASS were estimated at T1; activity indices were calculated after 1 month of therapy and correlated with PASS.

Results: Thirty-four RA patients were enrolled (age median-IQR 58-16 years; disease duration median-IQR 144-138 months; DAS-28 median-IQR 5.09-1.92). After 1 month of therapy, 30 of 34 patients achieved PASS, of which 73% in the first 2 weeks of treatment (days to achieve PASS median-IQR 12-22) (figure). At T1, patients achieving PASS, compared to those who did not, reported less pain (median VAS 30/100 vs 72/100, $p=0.025$), a better global assessment of disease (median 40/100 vs 72/100, $p=0.023$), lower CDAI (median 12 vs 31, $p=0.048$), SDAI (median 12.8 vs 33.95, $p=0.011$) and DAS-28 (median 3.67 vs 5.54, $p=0.082$). 10 out of 30 PASS positive patients (33%) achieved a DAS-28 low-disease activity or remission at T1 vs 0% of the PASS negative cohort ($p=0.169$). Age, disease duration and number of previous bDMARDs did not significantly differ between the two subgroups.

Conclusion: Baricitinib was able to induce an acceptable state of health in about 90% of patients after the first month of therapy. The prompt effect of baricitinib on pain and fatigue could partially explain the rapid achievement of PASS, as shown by the decrease of VAS and improvement of the global assessment of disease.

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AB0423

CHANGES IN DISEASE ACTIVITY, PAIN, GLOBAL HEALTH AND PHYSICAL FUNCTION AFTER SWITCHING FROM ORAL TO SUBCUTANEOUS METHOTREXATE: RESULTS OF THE SIX-MONTH OBSERVATIONAL PROSPECTIVE STUDY IN CROATIA

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Background: In rheumatoid arthritis (RA) and psoriatic arthritis (PsA) methotrexate (MTX) is usually the first choice in the treatment strategy.

Bioavailability of oral MTX reaches plateau in doses ≥ 15 mg weekly, and this is the reason of its lower clinical efficacy.

Objectives: The objective of this observational longitudinal study was to evaluate the changes in disease activity, intensity of pain, global health, and physical function when switching from oral (P.O.) to subcutaneous (S.C.) MTX in patients with RA and peripheral form of PsA.

Methods: Forty-eight consecutive patients (79.2% women) with established diagnosis of RA (77.1%) and peripheral PsA were enrolled from the outpatient clinics in six centres in Croatia. Median age was 61 (39-79) years, and the median of disease duration was 120 (3-528) months. Data were collected at baseline (T0) including retrospective data collection from the previous 3 months (on P.O. MTX), at day 90 (± 10 days) (T1) and at day 180 (± 10 days) (T2) for the previous periods, both of them during S.C. MTX treatment. Dose of MTX remained stable during the study. Domains of interest were Disease Activity Score on 28 joints measured using ESR (DAS28-ESR), level of pain, Patient's Global Health Assessment (PtGHA) and Physician's Global Health Assessment (PhGHA) were measured on horizontal 100 mm VAS, while physical function was measured by Health Assessment Questionnaire – Disability Index (HAQ-DI).

Results: Out of 48 patients 41 patients were switched to S.C. MTX monotherapy and 7 to S.C. MTX in combination with another csDMARD. At T1 40 patients were on S.C. MTX monotherapy and 8 on S.C. MTX in combination with another DMARD, and at T2 39 patients were on S.C. MTX monotherapy, 4 on S.C. MTX in combination with another DMARD, 1 on another DMARD and 4 were lost to follow-up. DAS28 showed trend of decrease from 4.9 at baseline to 4.6 at T1 and 4.2 at T2. Analysis of transition of patients according to DAS28 EULAR criteria has shown that percentage of patients with low disease activity has raised from 4.3% at T0, to 21.7% at T1, and 24.3% at T2, while percentage of patients with high disease activity has declined from 38.3% at T0 to 21.7% at T1 and 13.5% at T2. Recommendation for prednisone therapy > 7.5 mg/QD had 12.5% patients at T0 and T1, and only 6.8% patients at T2. There was a significant decrease in adjusted mean values for level of pain (-1.46; 95%CI -1.55, -0.35), PtGHA (-1.12; 95%CI -1.50, -0.73) and PhGHA (-1.15; 95%CI -1.50, -0.80). HAQ-DI showed significant improvement during the 6-month follow-up (-0.25; 95%CI -0.32, -0.17).

Conclusion: Patients who switched from P.O. to S.C. MTX showed improvement in all observed parameters: decrease of disease activity, reduction of pain, better global health, and physical function. Results of our study are in line with previously published literature data.

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AB0424

A RETROSPECTIVE STUDY OF ARTHROSCOPIC SYNOVECTOMY FOR REFRACTORY KNEE ARTHRITIS COMPLICATED WITH POPLITEAL CYST

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Background: Baker's cyst or popliteal cyst is the most common mass surrounding the knee joint that results from inflammatory knee arthritis. With increasing number of arthroscopic synovectomy performed for refractory knee arthritis annually, we aim to explore its value in baker's cyst treatment.^[1]

Objectives: To investigate the efficacy of arthroscopic synovectomy on refractory knee arthritis complicated with popliteal cyst.

Methods: A retrospective analysis of 153 patients (RA= 95, SpA= 58) with refractory knee arthritis, underwent knee arthroscopic synovectomy in our hospital from 2010 to 2017, was performed. Among them, 20 patients (RA= 16, SpA= 4) complicated with popliteal cyst. We compared the changes in inflammation makers, disease activity score, imaging manifestations, symptoms, the rate and the grading of popliteal cyst^[2] before and after the operation to evaluate the efficacy of knee arthroscopic synovectomy.^[3]

Results: Inflammation markers[ESR(49.42 $\pm$ 32.54 vs 24.46 $\pm$ 24.17, $P<0.001$), CRP(8.55 $\pm$ 16.43 vs 5.60 $\pm$ 22.45, $P<0.001$), Rheumatoid Factor(191.29 $\pm$ 373.72 vs 74.90 $\pm$ 158.31, $P<0.001$), DAS28 score(4.67 $\pm$ 1.25 vs 2.81 $\pm$ 1.23, $P<0.001$), knee joint discomfort score(5.2 $\pm$ 1.7 vs 1.9 $\pm$ 1.5, $P<0.001$) and the amount of knee joint effusion by ultrasound scanning ($P<0.05$) in 95 RA patients were significantly decreased compared to those before the operation; Inflammation markers[ESR(36.76 $\pm$ 28.71 vs 21.19 $\pm$ 9.79, $P<0.001$), CRP(21.19 $\pm$ 9.79 vs 3.36 $\pm$ 6.44, $P<0.001$), knee discomfort score (4.48 $\pm$ 1.06 vs 2.51 $\pm$ 1.54, $P<0.05$), back pain VAS score(2.74 $\pm$ 2.88 vs 1.56 $\pm$ 1.70, $P<0.001$), and the amount of knee joint effusion by ultrasound

scanning ($P<0.001$) in 58 SpA patients were significantly lower than those before the operation; the rate (16.84% vs 6.32%, $P=0.023$) and grading ($P=0.007$) of popliteal cyst in RA were decreased after the operation; No statistically difference was observed in the rate (6.90% vs 5.17%, $P=0.697$) of popliteal cyst in SpA, but the grading were all decreased in 4 patients.

Tab.2 Comparison of pre- and postoperative data in RA patients.

	Pre	Post	P
ESR($\bar{x} \pm s$)	49.42 $\pm$ 32.54	24.46 $\pm$ 24.17	<0.001
CRP($\bar{x} \pm s$)	8.55 $\pm$ 16.43	5.60 $\pm$ 22.45	<0.001
RF($\bar{x} \pm s$)	191.29 $\pm$ 373.72	74.90 $\pm$ 158.31	<0.001
DAS28($\bar{x} \pm s$)	4.67 $\pm$ 1.25	2.81 $\pm$ 1.23	<0.001
Knee discomfort score($\bar{x} \pm s$)	5.2 $\pm$ 1.7	1.9 $\pm$ 1.5	<0.001
Popliteal cyst(n,%)	16 (16.84)	6 (6.32)	0.023

Tab.4 Comparison of pre- and postoperative data in SpA patients.

	Pre	Post	P
ESR($\bar{x} \pm s$)	36.76 $\pm$ 28.71	21.19 $\pm$ 9.79	<0.001
CRP($\bar{x} \pm s$)	9.16 $\pm$ 21.46	3.36 $\pm$ 6.44	<0.001
Knee discomfort($\bar{x} \pm s$)	4.48 $\pm$ 1.06	2.51 $\pm$ 1.54	<0.05
Back pain($\bar{x} \pm s$)	2.74 $\pm$ 2.88	1.56 $\pm$ 1.70	<0.001
Popliteal cyst(n,%)	4 (6.90)	3 (5.17)	0.697

Conclusion: This study provide evidence that knee arthroscopic synovectomy has a good effect for refractory knee arthritis, which can reduce disease activity, improve joint symptoms and decrease the grading of popliteal cyst.

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AB0425

CONVERSE RELATIONSHIP OF URIC ACID AND VITAMIN D3 IN ADULT BAHRAINI PATIENTS WITH RHEUMATOID ARTHRITIS AND SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: The relationship between serum levels of uric acid (UA) and serum vitamin D3 (25(OH)D) in rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE) has been revealed separately. However, a possible link between these two factors in RA in comparison to SLE has not been clarified yet. This is the first study investigating the joint association between 25(OH)D and UA in two related rheumatic diseases in Bahrain.

Objectives: We aimed to evaluate the possible correlation between serum UA and serum 25(OH)D in adult Bahraini patients with RA and SLE and to examine if there are any differences or similarities between these two patient's groups.

Methods: Eighty adult Bahraini patients (RA=30 and SLE=50) were included in this longitudinal study (two-time points). The mean age of the patients was 45.21 years (range 16–77 years, SD=14.82). Females were

70 (87.5%). Only data for serum UA taken at the same time with vitamin D3 before and after vitamin D3 therapy were collected retrospectively from the patients' records at Salmaniya Medical Complex, Bahrain. The patients received oral vitamin D therapy at a dose of 50,000 IU weekly for 3 months.

Results: Our results showed that in our studied group the mean serum level of 25(OH)D was significantly increased from 48.17 at baseline to 78.87nmol/l after therapy with an increment of 30.71 ($P<0.0001$). Conversely, the mean serum level of UA in our cohort was significantly decreased from 333.26 at baseline to 304.67 μ mol/l after therapy ($P<0.001$). When segregated the group by disease: The mean serum level of 25(OH)D was significantly increased in SLE from 38.39 at baseline to 72.41 nmol/l after therapy ($P=0.000$), similarly in RA patients 25 (OH)D was significantly increased from 61.67 at baseline to 87.03nmol/l after therapy ($P=0.002$). In SLE serum UA decreased after vitamin D3 therapy, but the difference was not significant, while in RA the mean serum UA was significantly decreased from 309.83 to 262.03 after therapy ($P=0.001$). The SLE patients had statistically significant lower serum levels of 25(OH)D at baseline compared to RA ($p=0.000$). Conversely, RA patients had statistically significant lower serum levels of UA after vitamin D3 therapy compared to SLE ($p=0.016$). Age group >40 years had significant lower serum UA than those <40 before ($p=0.015$) and after therapy ($p=0.037$).

Conclusion: Our study showed that vitamin D3 therapy brought about 1.5 and 2.0 folds increment in its mean serum level in RA and SLE patients, respectively. RA patients showed more reduction in serum uric acid after vitamin D3 therapy compared to SLE, however, similar results manifested by age group>40 years compared to age group <40 yrs. The current study established that serum 25(OH)D levels were inversely correlated with serum uric acid levels in adult Bahraini patients with RA and SLE, thus, the correction of hypovitaminosis resulted in reduction of serum UA.

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AB0426

COMPARISON OF INFLUENCES OF DIFFERENT CONCOMITANT DRUGS IN RHEUMATOID ARTHRITIS PATIENTS TREATED WITH IGURATIMOD, A CONVENTIONAL SYNTHETIC DISEASE-MODIFYING ANTI-RHEUMATIC DRUG DEVELOPED IN JAPAN, IN REAL-WORLD CLINICAL SETTING

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Background: Igratimod (IGU) is csDMARDs developed in Japan and used in Japanese daily practice since 2012. Although IGU was developed as an anti-inflammatory drug at first, anti-rheumatic effect was found in experiments using type II collagen-induced arthritis model mice ¹⁾. Main mode of action of IGU was thought to be inhibition of NF- κ B resulted in decreased production of IL-6, IL-8 and TNF- α ²⁾. Clinical trials performed in Japan showed that efficacy of IGU was equal to sulfasalazine when used as monotherapy in patients with RA ³⁾. Additive efficacy to MTX was also shown in double-blind randomised trial in RA patients ⁴⁾. We reported efficacy of IGU in daily clinical practice in EULAR2017 ⁵⁾. IGU is prescribed as monotherapy or concomitantly with other DMARDs such as MTX, csDMARDs other than MTX or biological DMARDs.

Objectives: Influences of different concomitant drugs were compared in RA patients treated with IGU in this retrospective study.

Methods: 178 RA patients treated with IGU in our institute from April 2013 to June 2017 were included. Patients were divided into four groups. (1) Group in which IGU was started as monotherapy (MONO-G: n=59). (2) Group in which IGU was added on to MTX treatment without bDMARDs (MTX-G: n=81). (3) Group in which IGU was added on to csDMARDs treatment other than MTX (sulfasalazine, tacrolimus, bucillamin) (CSD-G: n=26). (4) Group in which IGU was added onto bDMARDs treatment. (BIO-G: n=12). Patients' characteristics, time course of disease activity (LOCF analysis), continuation rates of IGU (Kaplan-Meier) and reasons of stopping IGU were investigated and compared between groups.