Conclusions: Pain is a frequent and relentless suffering during the long-term course of rheumatoid arthritis. In this study, 34% of the patients had unacceptable pain 15 years after diagnosis indicating unsatisfactory treatment. Unacceptable pain also occurred in patients in remission indicating that pain in RA is multifactorial. Therefore, the cause of pain should be identified and treatment initiated accordingly.

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SAT0117 RETENTION RATES OF ADALIMUMAB, ETANERCEPT, AND INFLIXIMAB AS 1ST- OR 2ND-LINE BIOTHERAPY FOR RHEUMATOID ARTHRITIS PATIENTS IN DAILY PRACTICE IN AUVERGNE

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Background: The use of anti-tumor necrosis factor-alpha agents, or anti-TNFs, has greatly improved the treatment of rheumatoid arthritis (RA). The first three anti-TNFs available to us (infliximab, adalimumab, and etanercept) are the most widely used in treating RA. Their efficacy and safety, demonstrated in extensive randomized and controlled trials (RCTs), were not shown to vary significantly when compared indirectly based on randomized studies. Nevertheless, the randomized studies were of short duration and included a selected population that differed from patients treated in daily practice.
Objectives: To compare, in real-life conditions, the retention rates of the initial anti-TNF treatment (etanercept [ETN], adalimumab [ADA], and infliximab [IFX]) initiated as first-line biotherapy for rheumatoid arthritis (RA) and to evaluate, in case of failure, the switch to another anti-TNF or a non-anti-TNF biological.
Methods: Monocentric retrospective cohort including all patients with RA starting a first anti-TNF between 2001 and 2015.
Results: Among the 346 patients analyzed, 201 received ETN, 82 ADA, and 63 IFX. The first anti-TNF was interrupted in 151 cases. The retention rates were 82.8%, 67.6%, 46.5%, 28.1%, and 22.5% at 1, 2, 5, 10, and 15 years, respectively, with a median retention duration of 52.8 [18.9 -136.2] months (ETN: 59.3 [19.1-NA), ADA: 79.9 [19.3–136.2], and IFX: 37.2 [17.5–134.5], p=0.49). The predictive factors of discontinuation were active RA (DAS28-CRP HR: 1.22 [1.03–1.45]), inflammatory syndrome (ESR HR: 1.01 [1.0–1.02]; CRP HR: 1.00 [1.00–1.01]), absence of MTX treatment (HR: 0.60 [0.43–0.83]), and corticosteroid use (HR: 1.91 [1.31–2.78]). The patients who switched to another anti-TNF treatment had an inferior retention than those who switched to a non-anti-TNF treatment (HR: 0.39 [0.17 - 0.87], p: 0.02). p=0.02).
Conclusions: In real life, there was no difference in retention among the three anti-TNF agents, and 25% of patients continued them at 15 years. After failure of an anti-TNF, the switch to a non-anti-TNF biotherapy showed better retention.

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SAT0118 SAFETY AND EFFICACY OF ALTERNATE-DAY CORTICOSTEROIDS AS ADJUNCTIVE THERAPY IN RHEUMATOID ARTHRITIS

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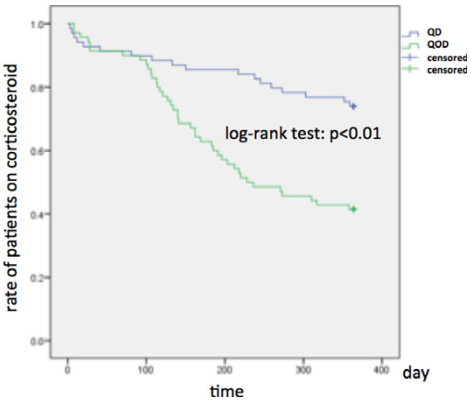
Background: Corticosteroids are often used for treating rheumatoid arthritis. However, minimizing adverse events while maximizing efficacy remains challenging. An alternate-day corticosteroid dose is known to decrease adverse events.
Objectives: To investigate the safety and efficacy of an alternate-day corticosteroid dose for treating rheumatoid arthritis.
Methods: We have conducted a retrospective cohort study among patients over 18-year-old who started oral corticosteroids (prednisolone and methylprednisolone) as treatment of rheumatoid arthritis from 2005 to 2014 at St. Luke's International Hospital, a tertiary-level community teaching hospital in Tokyo, Japan. Patients were included if they met the American College of Rheumatology/European League Against Rheumatism 2010 classification criteria for rheumatoid arthritis, and had positive anti-cyclic citrullinated peptide antibody. They were excluded for a history of corticosteroid use for other diseases, or if they were lost to follow-up within 1 year after starting corticosteroids. We divided patients into a daily corticosteroid group (QD) and an alternate-day corticosteroid group (QOD). Patients who received both daily and alternate-day corticosteroids were assigned to the daily group. We investigated the percentage of patients without any infection within 1 year after starting corticosteroids. We have conducted multivariate logistic regression model analysis to calculate adjusted odds ratio for QD/QOD to the outcome. We also investigated the mean decrease in C-reactive protein (CRP) at 1 month as a marker of short-term effectiveness, and the percentage of patients free from corticosteroid at one year, using student's t-test.
Results: In total, 139 patients were analysed (69 in the QD group, 70 in the QOD group). The maximum dose of corticosteroid in one year was not significantly different in two groups (11.4±7.7 mg/day VS 10.1±5.3 mg/day; P=0.267), and the mean daily dose of corticosteroid in one year was significantly higher in the QD group (6.1±4.4 mg/day vs 3.9±1.7 mg/day; P<0.01).The percentage of patients without any infection was 49.2% in QD group, and 75.7% in QOD group. Univariate analysis showed QD group is significantly associated with higher incidence of infection (P=0.001). After multivariate analysis adjusted with age, gender, initial CRP value, mean daily dose of corticosteroid in one year, use of biologic DMARDs, and duration of rheumatoid arthritis, the odds ratio of QD for any infection in 1 year was 3.9 (95% confidence interval [CI], 1.7–8.8; P=0.001).The mean decrease of CRP at 1 month was 1.5 mg/dl in QD group, and 1.1 mg/dl in QOD group (P=0.435).The percentage of patients free from corticosteroids at one year was 26.1% in QD group, and 58.6% in QOD group (P<0.01). Kaplan-Meier plot showed that QD group patients are more difficult to become free from corticosteroid (log-rank test: p<0.01).



Conclusions: Alternate-day corticosteroid dose has a lower adverse event rate and is as effective as a daily corticosteroid dose for treating rheumatoid arthritis.

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SAT0119 PREGNANCY OUTCOMES IN WOMEN WITH AND WITHOUT RHEUMATOID ARTHRITIS

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Background: Prior studies have suggested higher rates of preterm birth in pregnancies to women with rheumatoid arthritis.
Objectives: We sought to identify differences in the pregnancy outcomes of women with and without RA, and pregnancies that occurred prior to and following RA diagnosis.
Methods: A cross-sectional survey was completed by 75 women with RA age-matched to 75 women without RA. Information collected about each prior pregnancy included: pregnancy outcome (spontaneous abortion, stillbirth, elective termination, ectopic pregnancy, or live birth); the timing of delivery; infant anomalies; methotrexate exposure in pregnancy; and whether the pregnancy was planned. Simple statistics were used to compare pregnancy outcomes between women with and without RA and pregnancies prior to and following RA diagnosis.
Results: The majority of women with RA (83%) and controls (64%) were white, and 11% of women with RA and 28% of controls were African American. About half of controls and 31% of women with RA had education beyond college. The average age at the time of the survey was 32 years (SD: 5) in both RA patients and controls, and the average age at RA diagnosis was 23 years (SD: 10). There were 76 pregnancies in 40 women with RA and 99 pregnancies in 33 healthy controls (see table). The overall rates of live birth, spontaneous abortion, and ectopic pregnancies were similar between groups; there were no stillbirths.
The rate of elective termination was significantly different, with 9% of RA and 30% of control pregnancies terminated (p=0.005). The large majority of the terminations in women with RA occurred prior to diagnosis. The higher frequency of unplanned pregnancy among the controls (38% unplanned RA vs 67% unplanned controls, p=0.0002) likely contributed to this higher termination rate. Of unplanned pregnancies, 45% were terminated in controls, 33% in pre-RA pregnancies, and 9% in post-RA pregnancies. No planned pregnancies were terminated. Three pregnancies in women with RA were exposed to methotrexate (2 unplanned, 1 planned) resulting in 2 spontaneous abortions and 1 live birth, born at term without any reported abnormalities.
The rates of preterm birth and infant abnormalities did not differ significantly between those with and without RA, though among women with RA, all preterm births and infant abnormalities occurred after RA diagnosis. Each of the RA preterm births was delivered between 31–34 weeks gestation. Preeclampsia