obtained if only subjects with seropositive RA were included in the analysis. Adjustment for confounding factors did not affect the results (HR for bariatric surgery after adjustment for confounding factors 0.92, 95% CI 0.58-1.45, P=0.72).

Conclusion: In a large cohort of obese subjects followed up for up to 29 years, bariatric surgery did not affect the incidence of RA years.

REFERENCES:

Abstract THU0107 – Figure 1

Abbreviations: HR, hazard ratio; C.I., confidence interval.

Disclosure of Interests: Yuan Zhang: None declared, Lena Carlsson Consultant for: I have received lecture fees from AstraZeneca, MSD and Johnson&Johnson.


11. RHEUMATOID ARTHRITIS – PROGNOSIS, PREDICTORS AND OUTCOME CONCORDANCE BETWEEN PHYSICIAN AND PATIENT ASSESSMENT OF DISEASE ACTIVITY IN RHEUMATOID ARTHRITIS USING DISEASE ACTIVITY SCORE

Nelly Ziad1, Amami Daher1, Bassel Zorkany2, Samar Al Emadi3, Hussein Halabi4, Mohammad Abu Jbara1, Lina Kibb1, Sahar Saad5, Manal Masri6, Georges Merheb7, Elie Alam8, Jamil Messaykeh9, Alla Ayko10, Humera Badsha11, Ghita Harit11, Nelly Salloum12, Thuraya Arayssi13, Basel Masri7, AUTODAS MEAC,12 Saint-Joseph University, Beirut, Lebanon;13 Cairo University, Cairo, Egypt;14 Hamad Medical Corporation, Doha, Qatar;1 King Faisal Specialist Hospital and research center, Jeddah, Saudi Arabia;2 Al-Bashir hospital, Amman, Jordan;3 Specialized Medical Center, Riyadh, Saudi Arabia;1 King Hamad University Hospital, Bahrain, Bahrain;4 King Hussein Medical Center, Amman, Jordan;5 Holy-Spirit University, Kaslik, Lebanon;6 Levant hospital, Beirut, Lebanon;7 Al-Zahraa Hospital, Beirut, Lebanon;8 Monla Hospital, Tripoli, Lebanon;9 Al-Rassoul al-Azam hospital, Beirut, Lebanon;10 Dr Humeira Badsha Medical Center, Dubai, United Arab Emirates;11 Registered Nurse, Beirut, Lebanon;12 Well Cornell Medicine, Doha, Qatar;13 Jordan Hospital, Amman, Jordan

Background: Involving patients with rheumatoid arthritis (RA) in the assessment of their disease may increase adherence to treatment, improve disease outcomes and reduce consultation time.

Objectives: To evaluate the concordance between physician and patient assessment of disease activity in RA using Disease Activity Score (DAS-28).

Methods: During the routine consultation, patients were briefed about DAS-28 by their rheumatologist. Using a standard DAS-28 mannequin, physicians, patients and nurses reported the number of tender and swollen joints, inflammatory markers and global health on a 0-10 Likert scale. DAS-28, Clinical Disease Activity Index (CDAI) and Simple Disease Activity Index (SDAI) were calculated blindly by each participant. Agreement between physician- and patient-DAS categories was calculated using weighted kappa (WK) for category comparison. Concordance between physician- and patient-DAS was estimated using the Bland-Altman method. Predictive factors of positive concordance between physician and patient-DAS were identified using logistic regression.

Results: Four hundred and twenty patients from 7 Middle-Eastern countries were included, with a mean age of 49 years (SD 12), 84% of females, disease duration of 11 years (SD 8). Mean physician-DAS-28 was 4.03 (SD 1.51); 65% had positive rheumatoid factor, 56% had positive ACPA, 30% had erosive disease and 34% were on biotherapy. Agreement between physician- and patient-DAS categories was 89%, WK was 0.84. WK were 0.80 for DAS physician-nurse, 0.79 for DAS patient-nurse, 0.83 for CDAI physician-patient and 0.88 for SDAI physician-patient agreements respectively. All activity measures were higher in patients compared to physicians, except for the swollen joints count. The mean difference between physician- and patient-DAS was -0.09 [95% CI -0.14; -0.04] and was smaller in patients in remission (Figure 1: Bland Altman plot). Concordance was statistically associated with CRP and patient SDAI.

Conclusion: Concordance between patient and physician assessment of disease activity in RA was excellent and was higher using SDAI followed closely by DAS-28 and CDAI. Self-assessment of disease activity should be decided according to the physician’s clinical judgment.

REFERENCES:
Rheumatoid arthritis – comorbidity and clinical aspects

**THU0109** INCREASED MODIFIED HEALTH ASSESSMENT QUESTIONNAIRE (MHAQ) SCORE IS INDEPENDENTLY ASSOCIATED WITH HIGH RISK OF SEVERE INFECTION IN RHEUMATOID ARTHRITIS (RA) PATIENTS

Yuji Yoshida1, Shiro Ohshima1, Eri Oguro1, Kentaro Kuzuya1, Yasukata Okita1, Hitotoshi Matsuoka1, Satoru Teshigawara1, Makio Yoshimura1, Kentaro Isoda1, Yoshinori Harada1, Jun Hashimoto1, Yukihiko Saeki1, 1National Hospital Organization Osaka Minami Medical Center, Rheumatology and Allergology, Osaka, Japan; 2National Hospital Organization Osaka Minami Medical Center, Clinical Research, Osaka, Japan

**Background:** Severe infections that complicate rheumatoid arthritis may cause significant morbidity and mortality. The Modified Health Assessment Questionnaire (MHAQ) is one of the scores most used for measuring the functional status of rheumatoid arthritis (RA) patients. However, the relationship between the MHAQ score and severe infection risk has not been well studied [1].

**Objectives:** To examine the relationship between disease-associated functional status (MHAQ) and severe infection events (SIE) in rheumatoid arthritis patients.

**Methods:** We used data from the ‘MiRAi’ cohort in Japan. In total, 2174 RA outpatients were examined at the Osaka Minami Medical Center between January 2012 and October 2017. The risk factors were identified and evaluated by multivariate logistic regression, linearity analysis. Interactions of SIE risk between MHAQ and treatment were also observed.

**Results:** The cohort contributed to 8206 patient-years of follow-up. Overall, 251 SIEs were observed and the incidence of SIE was 3.0 infections per 100 patient-years. The mean age at first observation was 61.7 years and the mean disease duration was 10.3 years. The use of glucocorticoids (GCs), methotrexate (MTX), and biologic and targeted synthetic disease-modifying antirheumatic drugs (bDMARDs/tsDMARDs) was 59.2%, 63.8%, and 40.3%, respectively. The mean Clinical Disease Activity Index (CDAI), Simplified Disease Activity Index (SDAI), Disease Activity Scores of 28 joints (DAS28), and MHAQ at first observation were 9.76±6.39, 10.1±6.87, 2.67±0.96, and 0.43±0.58, respectively. Disease duration, the MHAQ score, and prednisolone dose (p=0.015, 0.007, and <0.001, respectively) were significantly associated with SIE risk (Figure). Age, sex, stage, bDMARDs/tsDMARDs use, DAS28- CRP, and MTX dose (mg/week) did not predict a significant increase in SIE. The risk of SIE increased linearly with the MHAQ. The SIE risk increased rapidly from 0 to 5 mg of prednisolone, and then increased gradually over 5 mg. The SIE risk peaked at around 20 years disease duration. No significant interaction between MHAQ and bDMARDs/tsDMARDs or glucocorticoid use were observed (p=0.307, 0.282, respectively).

**Conclusion:** An increased MHAQ score was linearly associated with SIE and did not show significant interactions with bDMARDs/tsDMARDs use or the oral glucocorticoid dose. Therefore, the MHAQ score is considered to be a strong, independent risk factor for infection in RA patients.