measures, the power Doppler joint count (UPDJC), which demonstrates hyper vascularization of the synovium, and the 12-multibiomarker disease activity test (MBDA), which incorporates 12 biomarkers in an algorithm leading to a single disease activity score. The UPDJC includes scoring at six dorsal wrist and six dorsal MCP sites [2]. The average duration of RA in patients at this clinic is > 10 years.

Results: Fifty two patients were found to be in inadequate control at the clinic and were started on Tofacitinib. Ten patients discontinued treatment with Tofacitinib within the first year, four because of an inadequate response, and four because of adverse effects (two deaths, one with lung cancer and one with colon cancer), and two because of noncompliance or loss to follow up. Forty two patients remained on treatment with Tofacitinib for at least one year, and at this point in time, 21 patients have remained on the drug for two or more years. The DAM assessments and selected changes in certain laboratory parameters for two yearly time points are shown for these patients in Table 1.

Clinical significance was determined by Paired-samples T tests. Conclusion: Patients showed sustained significant clinical responses for two or more years by all three diverse DAMs and several other common measures of clinical response. The initiation of Tofacitinib in a Rheumatology clinic utilizing a T2T strategy clearly showed sustained clinical responses for up to two years for a significant number of patients. Significant changes in some of the cytokine components of the MBDA were also noted, including increases in leptin levels.

The use of the T2T strategy offers a unique opportunity to obtain real time data on patients treated with specific therapeutic agents at a community rheumatology clinic.

Abstract THU0105 – Table 1

| Table 1: Clinical Responses Following the Treatment of RA Patients with Tofacitinib |
|------------------|------------------|------------------|------------------|------------------|
| Baseline         | Year One         | Year Two         | Year Three       | Year Four        |
| SII              | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| UPDJC            | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| NLR              | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| PLR              | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| CRP              | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| ESR              | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| HAPE             | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| LBP (5)          | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| LBP (10)         | N (Data)         | N (Data)         | N (Data)         | N (Data)         |
| LBP (20)         | N (Data)         | N (Data)         | N (Data)         | N (Data)         |

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THU0107

BARIATRIC SURGERY DOES NOT PREVENT THE DEVELOPMENT OF RHEUMATOID ARTHRITIS IN OBESE SUBJECTS

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Background: Obesity is among the risk factors for rheumatoid arthritis (RA) [1,2]. In subjects with RA, bariatric surgery-induced weight loss has been associated with a lower disease activity, a decrease in inflammatory markers and a lower use of disease-modifying antirheumatic drugs [3]. However, the effect of bariatric surgery on the prevention of RA is not known. We have previously shown that bariatric surgery reduces the risk of gouty arthritis and psoriasis in obese subjects [4,5].

Objectives: By exploiting a longitudinal study enrolling more than 4000 obese subjects, we aim to determine if bariatric surgery prevents the incidence of RA.

Methods: The Swedish Obese Subjects (SOS) study is a longitudinal controlled trial on the effect of bariatric surgery on the incidence of obesity-related diseases. It includes 4047 obese subjects: 2010 underwent bariatric surgery and 2037 constituted the matched control group [6]. Seven Swedish local ethics review boards approved the study protocol. SOS study participants who developed RA were identified by searching the Swedish National Patient Register. Eleven subjects with prevalent RA at baseline are excluded by the analyses. Patients were followed up until diagnosis of RA, death, migration or end of follow-up (December 2016).

Results: During a follow-up up to 29 years, 92 subjects developed RA. Fifty-one individuals (55%) had a seropositive RA (serostatus was unknown for 17 subjects). Forty-seven subjects (2.3%) developed RA in the surgery group compared to 45 subjects (2.2%) in the control group. Bariatric surgery was not associated with the incidence of RA during follow-up (log-rank P=0.88; unadjusted Hazard Ratio-HR 1.03, 95% Confidence Interval-Cl 0.69-1.55, P=0.88, Figure 1). Similar results were
REFERENCES:


Abstract THU0107 – Figure 1

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

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THU0108 11. RHEUMATOID ARTHRITIS – PROGNOSIS, PREDICTORS AND OUTCOME CONCORDANCE BETWEEN PHYSICIAN AND PATIENT ASSESSMENT OF DISEASE ACTIVITY IN RHEUMATOID ARTHRITIS USING DISEASE ACTIVITY SCORE

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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 joint, 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: