troponin T, were identified through records of ED visits and cross-referenced to other registers. The outcome measure was ACS, defined as a discharge diagnosis of MI, unstable angina requiring urgent revascularisation, or death within 30 days (for directly discharged only). The association between RA and the outcome was assessed using logistic regression.

Results: ACS was more common in patients with RA (4.7%) than in subjects without RA (3.3%) – but this difference was largely attributable to RA patients being older and, upon taking age and gender into account, not statistically significant ($p=0.13$). Overall and across all individuals with chest pain and/or a troponin T test taken, RA was not associated with ACS when adjusting for age, demographics and comorbidity, odds ratio (OR) 1.24, 95% confidence interval (CI): 0.95–1.61. In analyses restricted to patients presenting with chest pain (irrespective of troponin T test status, $n=49$ 283), a significant association between RA and ACS was observed (adjusted OR 1.40 95% CI 1.01–1.96).

Figure 1 Odds ratios for myocardial infarction (MI) in rheumatoid arthritis (RA) patients compared with unexposed. Patients with suspected MI in the emergency department (ED) grouped by presence of chest pain. Other chief complaints than chest pain labelled as atypical complaints. MI refers to combined outcome of MI or 30 day major cardiac event (MACE). * Model 1: adjusted for age, gender, hospital, year of ED visit. † Model 2: adjusted for age, gender, hospital, year of ED visit, smoking, estimated glomerular filtration rate (eGFR), hypertension, hyperlipidaemia, diabetes mellitus, obesity, atrial fibrillation, heart failure and previous cardiovascular disease. Previous cardiovascular disease meant having one of the following diagnoses: previous stroke or MI, angina pectoris or peripheral vascular disease.

Conclusions: Although RA was not an independent risk factor for ACS among all patients subjected to a cardiac diagnostic work-up in the ED, RA was an independent risk factor among patients presenting with chest pain as chief complaint, an association that was not readily explained by traditional cardiovascular risk factors. The combination of RA and chest pain should thus increase the suspicion of ACS.

Disclosure of Interest: None declared

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THU0138 OCCURRENCE OF IN-STENT RESTENOSIS AFTER CORONARY DRUG-ELUTING STENT IMPLANTATION IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is associated with increased risk of cardiovascular events. Thus, patients with RA have a greater chance of undergoing coronary drug-eluting stent (DES) implantation. However, it is not known whether the rate of in-stent restenosis (ISR) is also increased in RA patients.

Objectives: To investigate characteristics of in-stent restenosis (ISR) after drug-eluting stent (DES) implantation in patients with rheumatoid arthritis (RA), and to evaluate the effect of disease modifying anti-rheumatic drugs (DMARDs) on ISR.

Methods: Patients with RA who underwent DES implantation between January, 2005 and March, 2017 were included. Characteristics of the patients and the vessel lesions were reviewed retrospectively. To evaluate the effect of DMARDs on ISR, previously known ISR risk factors and ISR incidence were compared between the treated vessels of patients who did and did not receive specific DMARDs.

Results: In total, 30 RA patients (43 vessel lesions) were included. 4 treated vessel lesions developed ISR (4/43, 9.3%) in median 106.8 (81.1–109.0) months after DES implantation. Compared with the previous data in general population (occurrence of ISR: 3%–20%, mean time of ISR occurrence: 13 months), the

Abstract THU0138 – Table 1. Comparison between treated vessels in the MTX group and treated vessels in the non-MTX group

	Treated vessels in the MTX group (n=31)	Treated vessel in the non-MTX group (n=12)	p-value
General characteristics			
Female, n (%)	16 (51.6)	5 (41.7)	0.558
HTN, n (%)	19 (61.3)	5 (41.7)	0.245
Smoking, n (%)	Current smoker, 4 (12.9)	Current smoker, 1 (8.3)	0.615
Statin, n (%)	27 (87.1)	12 (100.0)	0.563
Other csDMARDs, n (%)	26 (83.9)	12 (100.0)	0.300
DAS28-CRP	1.54 (1.36–1.90)	1.51 (1.25–1.93)	0.547
Risk factors of ISR			
Age (year)	68.0 (60.0–71.0)	65.5 (59.0–73.0)	0.820
DM, n (%)	13 (41.9)	5 (41.7)	0.987
Vessel disease, n (%)	1-vessel disease, 13 (41.9) 2-vessel disease, 13 (41.9) 3-vessel disease, 5 (17.2)	1-vessel disease, 2 (16.7) 2-vessel disease, 8 (66.7) 3-vessel disease, 2 (16.7)	0.305
Ostial lesion, n (%)	3 (9.7)	2 (16.7)	0.608
LAD involvement, n (%)	18 (58.1)	4 (33.3)	0.146
Multiple lesions, n (%)	10 (32.3)	7 (58.3)	0.168
Type of DES, n (%)	Zotarolimus, 9 (29.0) Everolimus, 8 (25.8) Sirolimus, 12 (38.7) Pacitaxel+Cilostazol, 1 (3.2) Biolimus, 1 (3.2)	Zotarolimus, 1 (8.3) Everolimus, 6 (50.0) Sirolimus, 3 (25.0) Pacitaxel+Cilostazol, 2 (16.7) Biolimus, 0 (0.0)	0.161
Diameter (mm)	3.00 (3.00–3.50)	3.00 (2.81–3.00)	0.243
Length (mm)	29.0 (24.0–48.0)	21.0 (15.0–30.3)	0.018
ISR, n (%)	0 (0.0)	4 (33.3)	0.004

incidence was similar, but the time to ISR occurrence was much longer. In the comparison of patients receiving MTX ($n=31$ vessel lesions) and those not receiving MTX ($n=12$ vessel lesions), the ISR incidence was significantly different [0/31 (0.0%) vs. 4/12 (33.3%), $p=0.004$].

Conclusions: ISR after DES implantation in RA patients occurs in a similar rate, but after a much longer period of time than in the general population. Administration of MTX in patients with RA might have potential benefit to prevent ISR after DES implantation.

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THU0139 INCREASED HOMOCYSTEINE LEVEL FOR 7 YEARS IN PATIENTS WITH RHEUMATOID ARTHRITIS: TOMORROW STUDY

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Background: Osteoporosis is a disease in which not only bone density but also bone quality is low. Patients with rheumatoid arthritis (RA) are at higher proven risk of osteoporosis. Increased homocysteine (Hcy), one of the main markers of bone quality, is caused by insufficiency of folate or vitamin B. Elevation of Hcy inhibits physiological crosslink of collagen, which yields worse bone quality.

Objectives: In this study, we evaluated Hcy level as a bone quality marker in patients with RA for a period of 7 years and compared Hcy in RA patients with that in healthy volunteers (Vo).

Methods: We used the data for 7 years from a prospective cohort study (TOMORROW Study: UMIN000003876), which started in 2010 and compares data from RA patients with age- and sex-matched volunteer controls (Vo) recruited through mass media. Laboratory data were collected for all participants, including bone metabolic markers (urinary pentosidine, Hcy, collagen type 1 crosslinked N-telopeptide (NTX), and osteocalcin) and anthropometric parameters. Bone mineral density (BMD) of the lower leg was determined using whole-body dual-energy X-ray absorptiometry (DXA). Their parameters were compared with those of healthy controls, and multiple regression analysis was carried out