through the population census of the National Institute of Statistics, with an estimated prevalence of RA of 0.5% in both sexes (0.2% in men and 0.8% in women). Crude and adjusted rates were calculated at the national level. The trend was analyzed by Generalized Linear Models (GLM) using the year variable as the analysis variable. Clinical-demographic factors associated with these infections were analyzed, using uni and multivariate logistic regression.

Results: Of the total of 338,343 hospital admissions in patients with RA during the 17 years of the study period, there were 4,097 (1.2%) admissions with opportunistic infection, 1591 (38.8%) in men and 2506 (61.2%) in women ($p < 0.001$). The infections found in order of frequency were: HZ 1295 (29.9%), Tbc 1227 (29.9%), Aspergillosis 357 (8.7%), systemic candidiasis 342 (8.3%), CMV 270 (6.5%), EBV 133 (3.2%), Pneumocystosis 122 (2.9%), Leishmaniosis 100 (2.4%), Listeriosis 98 (2.3%), Mycobacteria no tbc 85 (2%), Nocardiosis 86 (2.1%), Trypanosoma Cruzi 19 (<1%), JVC 19 (<1%), Cryptococcosis 15 (<1%), Toxoplasmosis 14 (<1%), Strongyloides 11 (<1%), Cryptosporidium 6 (<1%), Histoplasmosis 1 (<10%), blastomycosis 1 (<1%). Between 20-40 years the most frequent infections were: Tbc, EBV, CMV; Between 40-60 years: Tbc, HZ, CMV; Over 60 years old: HZ, tbc, aspergillus. The mean age was 65.54 (SD16.6). 445 (10.9%) died during admission; 217 (13.6%) in men and 228 (9.1%) in women ($p < 0.001$). The mean of the Charlson index was 1.96 (1.49), 2.21 (SD1.6) in men and 1.81 (SD1.3) in women ($p < 0.001$). The Relative Risk male: female was 2.77. The infections with the highest male/female RR were: Leishmaniosis (4.77), Listeriosis (4.1) and Aspergillosis (3.8). The infections with the highest lethality were: Pneumocystosis (31%), Candidiasis (29.8%) and Aspergillosis (27.7%). The age-adjusted rate for all OI was 146.21/100,000 inh*year, 297.05 in men and 107.37 in women. Adjusted IO rates increased from 85.47 in 1999, to 193.48 in 2015. It is estimated that this increase is of 4.96% per year. In the multivariate analysis, the factors associated with OI were: male, COPD and liver disease.

Conclusion: In Spain, during the period 1999 to 2015, there has been an increase in the incidence rate of OI in patients with RA. We estimate an annual increase of 4.9%. Being male and having COPD or liver disease are associated with OI.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.2494

THU0146

POOR COMPLIANCE BY RHEUMATOLOGISTS AND ORTHOPAEDISTS WITH GUIDELINES FOR THE PERIOPERATIVE MANAGEMENT OF RHEUMATOID ARTHRITIS PATIENTS UNDERGOING ARTHROPLASTY

Kieran Murray¹, Tristan Cassidy², Abuelmagd Abdalla¹, Timothy Murray³, Anna O'Rourke¹, Douglas Veale¹. ¹Saint Vincent's University Hospital, Dublin 4, Ireland; ²Cappagh Hospital, County Dublin, Ireland; ³Beaumont Hospital, Dublin, Ireland

Background: Appropriate management can reduce the increased perioperative infection risk in RA patients(1). In 2017, American College of Rheumatology (ACR) and the American Association of Hip and Knee Surgeons released *Guidelines for the Perioperative Management of Anti-rheumatic Medication in Patients With Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty*(1). Atlanto-axial subluxation at induction of general anaesthetic (GA) is another concern. Preoperative C-spine X-rays with flexion-extension views are recommended(2).

Objectives: Assess compliance with medication guidelines and C-spine imaging practices for RA patients undergoing arthroplasty under GA.

Methods: An anonymous 24 question paper-based survey was distributed at Irish Society of Rheumatology Meeting (September 2017) and Irish Institute of Trauma and Orthopaedic Surgery Curriculum Day (January 2018) examining clinician demographics, imaging and prescribing practices.

Results: 33 orthopaedists and 23 rheumatologists responded. The majority (n=46) were trainees and <40 years old (n=43). Most rheumatologists were female and orthopaedists male.

The guideline advocates cDMARD continuation perioperatively(1). Rheumatologists are more likely than orthopaedists to continue cDMARDs (Pearson Chi squared, 0.001). 8 (36%) rheumatologists continue cDMARDs, 6 (27%) stop one week preoperatively and 8 (36%) at two weeks. 1 orthopaedist never stops cDMARDs. 8 (24%) stop at one week preoperatively, 13 (39%) at 2 weeks, 5 (15%) at 4 weeks. 6 (18%) were unsure.

The guideline advocates stopping bDMARDs 1 dosing cycle preoperatively and restarting after wound healing. Depending on the agent, 2 to 4 rheumatologists never stop bDMARDs preoperatively. Responses varied by medication half-life. 18 hold etanercept for <4 weeks and 11 hold rituximab for >8 weeks. 2 orthopaedists never stop bDMARDs preoperatively.

Depending on the agent, 14-15 would stop <4 weeks prior, 10-12 were unsure, 4-8 weeks was chosen 4-5 times and >8 weeks 0-1 times.

Regarding patients on glucocorticoids for RA, the guideline advocates continuing current dosing perioperatively. 6 orthopaedists always increase steroids (13 sometimes, 9 never, 5 unsure). 7 never stop (13 sometimes, 6 always, 5 unsure). 12 rheumatologists sometimes increased steroids (8 always, 1 never, 1 not sure, 1 no answer). 14 never stop steroids (8 sometimes, one not sure).

In RA patients undergoing GA, 22 orthopaedists always perform C spine imaging prior (10 sometimes, 1 never). 11 rheumatologists always do C spine imaging prior (11 sometimes, 1 never). Orthopaedists are more likely than rheumatologists to always perform spinal imaging preoperatively (P value=0.002, Fisher's exact test).

Abstract THU0146 – Figure 1. Number of clinicians who always order C spine imaging prior to arthroplasty in RA patients undergoing GA

Conclusion: There is poor compliance with guidelines and variability and uncertainty in prescribing. Orthopaedists often discontinue sDMARDs preoperatively despite guidelines to the contrary. Orthopaedists are more likely than rheumatologists to perform preoperative C spine imaging as per recommendations.

REFERENCES:

- [1] Goodman SM, Springer B, Guyatt G, Abdel MP, Dasa V, George M, et al. 2017 American College of Rheumatology/American Association of Hip and Knee Surgeons guideline for the perioperative management of antirheumatic medication in patients with rheumatic diseases undergoing elective total hip or total knee arthroplasty. *Arthritis care & research*. 2017;69(8):1111-24.
- [2] Wasserman BR, Moskovich R, Razi AE. Rheumatoid arthritis of the cervical spine. *Bull NYU Hosp Joint Dis*. 2011;69:136-48.

Disclosure of Interests: Kieran Murray Grant/research support from: Newman Research Fellowship (Abbvie), Tristan Cassidy: None declared, Abuelmagd Abdalla: None declared, Timothy Murray: None declared, Anna O'Rourke: None declared, Douglas Veale: None declared

DOI: 10.1136/annrheumdis-2019-eular.5926

THU0147

FACTORS CONTRIBUTING TO DISCREPANT ESTIMATED GLOMERULAR FILTRATION VALUES MEASURED BY CREATININE AND CYSTATIN C IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA)

Akikatsu Nakashima¹, Shigeto Horita¹, Takahiro Matsunaga¹, Ryo Inoue², Ichiro Mizushima³, Mitsuhiro Kawano³, Hideki Nomura⁴. ¹Ishikawa Prefectural Central Hospital, Division of Nephrology and Rheumatology, Kanazawa, Japan; ²Ishikawa-ken Saiseikai Kanazawa Hospital, Division of Internal Medicine and Rheumatology, Kanazawa, Japan; ³Graduate School of Medical Science, Kanazawa University, Department of Rheumatology, Kanazawa, Japan; ⁴Kanazawa University Hospital, Department of General Medicine, Kanazawa, Japan

Background: In rheumatoid arthritis (RA) patients, it is important to evaluate renal function, because it may deteriorate due to RA itself or drug use requiring drug dose adjustment. Recently, Cystatin C (CysC) has been used as a more accurate marker of renal function than Creatinine (Cr), because it is not affected by muscle mass.¹⁾ Renal function of some RA patients is overestimated by Cr, and shows a discrepancy in the estimated glomerular filtration between Cr and CysC. However, what