functionality are measured with VAS pain scale, WOMAC, Lysholm and SF 36 score. The agreement between two methods was evaluated with Bland-Altman analysis.

Results: We found a statistically significant low level of rank correlation between CR and US measurements of mean cartilage thickness; ρ (rho) values between modalities were low (0.263 and 0.273 depending on side (right/left), $p=0.005$ and $p=0.007$ respectively). In Bland – Altman analysis, US measurement showed bad agreement with CR. Presence or absence of US features of OA (effusion, synovial hypertrophy, osteophytes and popliteal cysts) didn't influence on cartilage thickness assessed by US ($p>0.05$). For US assessment, we found correlation only between cartilage thickness and VAS pain scale (ρ (rho) -0.281, $p=0.004$). We didn't find any statistically significant correlation between CR thickness measures and pain/functionality/HRQoL scores ($p>0.05$).

Conclusion: These results suggest that ultrasound may be a useful clinical tool to assess relative cartilage thickness. However, the absolute validity of the ultrasound measure is called into question due to the larger CR-based thickness measures and low level of agreement according to Bland-Altman analysis. The use of ultrasound as a complementary imaging tool along with CR may enable more accurate and cost-effective detection, prognosis and follow-up of knee osteoarthritis in routine clinical practice.

References:

- [1] Mehta N, Duryea J, Badger GJ, et al. Comparison of 2 Radiographic Techniques for Measurement of Tibiofemoral Joint Space Width. *Orthop J Sports Med.* 2017;5:2325967117728675.
- [2] Schmitz RJ, Wang HM, Polprasert DR, Kraft RA, Pietrosimone BG. Evaluation of knee cartilage thickness: A comparison between ultrasound and magnetic resonance imaging methods. *Knee.* 2017;24:217–223.
- [3] Podlipská J, Guermazi A, Lehenkari P, et al. Comparison of Diagnostic Performance of Semi-Quantitative Knee Ultrasound and Knee Radiography with MRI: Oulu Knee Osteoarthritis Study. *Sci Rep.* 2016;6:22365
- [4] Razek AA, El-Basyouni SR. Ultrasound of knee osteoarthritis: interobserver agreement and correlation with Western Ontario and McMaster Universities Osteoarthritis. *Clin Rheumatol.* 2016;35:997–1001.
- [5] Oo WM, Bo MT. Role of Ultrasonography in Knee Osteoarthritis. *J Clin Rheumatol.* 2016;22:324–329.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.3049

SATURDAY, 06 JUNE 2020

Epidemiology, risk factors for disease or disease progression

SAT0573

TUBERCULOSIS INFECTION IN MOROCCAN PATIENTS WITH RHEUMATIC DISEASES UNDER BIOLOGIC THERAPY: A MULTICENTER NATIONAL STUDY

I. Aachari¹, T. Latifa¹, T. Fatima Zahrae¹, S. Afilal¹, F. Safaa¹, J. Moulay Berkchi¹, H. Rkain^{1,2}, F. Allali¹. ¹El Ayachi Hospital, Rheumatology, Salé, Morocco; ²Laboratory of Physiology, Faculty of Medicine and Pharmacy, Mohammed V University, Rabat, Morocco

Background: Tuberculosis (TB) is a major health problem worldwide, occurring mainly in low income countries. Therefore, screening for latent TB infection (LTBI) before initiating biologic therapy is mandated by current guidelines.

Objectives: The aim of this study was to evaluate the prevalence of tuberculosis infection (TB) in Moroccan patients with rheumatic diseases under biologic therapy, and to describe the demographic characteristics of these patients as well as to explore potential risk factors.

Methods: This fourteen-year nationally representative multicenter study enrolled Moroccan patients with rheumatic diseases who had been treated with biologic therapy. Patient medical records were reviewed retrospectively for demographic characteristics, underlying rheumatic diseases, associated co-morbidities, and TB related data.

Results: In total, 1407 eligible patients were studied; 31 cases with active TB were identified at an estimated prevalence rate of 2.3%. The mean age was 42.9±12 years and 75.8% were males. Ankylosing spondylitis (AS) accounted for 84.8% of active TB cases and the majority of cases (31/33) occurred among anti TNF- α users. A total of 8 out of 33 patients were positive at initial Latent TB infection (LTBI) screening by tuberculin skin test (TST) and/ or interferon gamma release assay (IGRA). Consumption of unpasteurized dairy products (odds ratio [OR], 34,841; 95% CI, 3,1-389,7; $p=0.04$), diabetes (OR, 38,468; 95% CI, 1,6-878,3; $p=0.022$), smoking (OR, 3,941; 95% CI, 1-159,9; $p=0.047$) and long biologic therapy duration (OR, 1,991; 95% CI, 1,4-16,3; $p=0.001$) were identified as risk factors for developing active TB.

Conclusion: Moroccan patients with rheumatic diseases under anti TNF- α agents are at an increased TB risk especially when risk factors are present. Strict initial screening and regular monitoring of LTBI is recommended for patients living in high TB prevalence areas.

Table 1. Risk factors by univariate and multivariate logistic regression.

Disclosure of Interests: None declared

Variables	Univariate analysis			Multivariate analysis		
	Odds Ratio	95% CI	p value	Odds Ratio	95% CI	p value
Age	0,999	0,97-1,028	0,929			
Sexe	0,973	0,388-2,443	0,954			
Marital status :						
▪ Married	0,593	0,259-1,357	0,216			
▪ Single	1,685	0,737-3,855	0,216			
Residence :						
▪ Urban	0,778	0,189-3,199	0,728			
▪ Rural	1,286	0,313-5,288	0,728			
Level of education :						
▪ Illiterate	1,313	0,547-3,150	0,542			
▪ Primary	2,370	0,797-7,047	0,121			
▪ Secondary	0,918	0,314-2,683	0,875			
▪ Tertiary	1,123	0,345-3,649	0,847			
Consumption of unpasteurized dairy products	3,571	1,531-8,330	0,03	34,841	3,1-389,7	0,04
Diabetes	5,145	1,140-23,211	0,033	38,468	1,6-878,3	0,022
Smoking	3,667	1,311-10,253	0,013	3,941	1-159,9	0,047
Type of rheumatic disease :						
▪ Ankylosing spondylitis	0,276	0,07-0,781	0,15			
▪ Rheumatoid arthritis	0	-	0,999			
Biologic therapy :						
▪ Adalimumab	1,151	0,511-2,593	0,734			
▪ Infliximab	1,340	0,583-3,079	0,491			
▪ Etanercept	2,29	0,675-7,804	0,183			
▪ Rituximab	0,272	0,033-2,210	0,223			
▪ Tocilizumab	0,223	0,033-2,210	0,223			
▪ Golimumab	0,979	0,098-9,751	0,986			
▪ Secukinumab	0	-	0,999			
Duration of exposure to bDMARD (months)	1,462	1,261-1,695	<0,001	1,991	1,4-16,3	0,001

DOI: 10.1136/annrheumdis-2020-eular.1616

SAT0574

RISK FACTORS ASSOCIATED WITH OPIOID USE AMONG WORKER'S COMPENSATION: A LITERATURE REVIEW

M. Agalioitis¹, A. Sran². ¹Australian Institute of Health Service Management (AIHSM), University of Tasmania, Rozelle Campus, Australia; ²University of New South Wales, School of Public Health & Community Medicine, Kensington, Australia

Background: To increase recovery and return to work after an occupational accident or injury, a worker's compensation claim provides individualised management plan involving multiple kinds of treatment. These plans can consist of the prescription of opioids to reduce inflammation, provide pain relief and increase functionality within a short period of time to aid return to work. Recently, there have been growing concerns about the misuse of opioids in managing pain symptoms by both the insurance industry and the general community. Studies from North America have indicated the prescription and management of opioid consumption among workers compensation claimants can cause more harm to functionality and reduce recovery to return to work, often leading to misuse, dependency or overdosing (Dembe, Wickizer, Sieck, Partridge & Balchick (2012)).

Objectives: The aims of this abstract are to provide a comprehensive literature review of the studies that have examined: 1) the prevalence of opioid use among worker compensations claimants and, 2) identify predictors of long-term opioid use among the workers compensation claimants.

Methods: A search strategy, with terms associated with "worker compensation," "opioids" "prevalence" and/or "risk factors" were used to search through relevant databases such as CINAHL, Cochrane, Embase, MEDLINE, PsycINFO, Scopus and Web of Science from database inception to January 2020. Duplicates were excluded. Two researchers retrieved, screened for eligibility and reviewed the results accordingly using a staged approach. Systematic review registration number PROSPERO registry number: CRD42013004137.

Results: The search yielded 2857 records. After the initial screening, 125 full-text articles were assessed by two independent reviewers. The inclusion criteria were met by nine studies 1-9. All studies conducted retrospective cohort studies using workers compensation claimant's data, ranging from 54,931, to 100,357 reports, either over a short 12-month period to over 11 years, with no reporting of response rate or recruitment rates. All studies examined the association of being exposure to opioids from the date of the workers injury(7), ranging from 30 to 730 days or from 0 days to 4 or more years 1-9. Carnide et al (2018)2 was the only study to investigate opioid exposure before and after injury as a predictor of future long term use. Among those who examined work-opioid related factors (4) found workers compensation reports with work disability for more than 14 days where more likely to become a long term opioid uses (OR: 2.17 [95% CI:1.52–3.10])1. Kraut et al7 on the other hand, found being a worker's compensation claimant increased the risk of being prescribed ≥ 120 morphine equivalents (ME)