Case	Sex	Age (years)	Duration of RA (months)	RF +/-	APCA +/-	Erosive RA	HZ Localization	Previous Herpes Viral serology	HZ Treatment	Concomitant treatment for RA
1	♀	74	339	+	+	Yes	Left arm	IgG+ IgM NR	Famciclovir	Corticoids/MTX/TCZ
2	♀	86	142	+	-	Yes	-	IgG+ IgM -	None (topic)	ETN
3	♀	80	90	-	-	Yes	Gluteus (right)	IgG + IgM NR	Brivudina	HCCQ
4	♀	83	313	+	-	Yes	D9-D10 metamer	IgG + IgM -	Brivudina	Corticoids/MTX/RTX
5	♀	52	222	+	-	Yes	Generalized	IgG + IgM NR	Aciclovir	Corticoids
6	♀	70	171	+	-	No	Left arm	IgG+ IgM NR	Aciclovir	Corticoids/MTX/ADA
7	♀	68	1	+	-	Yes	Intercostal (left)	IgG + IgM -	Brivudina	Corticoids/HCCQ
8	♀	61	40	-	-	No	-	IgG + IgM NR	-	Corticoids/LFN/TCZ
9	♂	58	34	+	+	No	Intercostal (left)	IgG + IgM NR	Famciclovir	None
10	♀	62	67	+	+	Yes	Intercostal (left)	IgG + IgM NR	Aciclovir	LFN/ETN
11	♀	50	5	-	-	No	Intercostal (left)	IgG + IgM NR	Aciclovir	Corticoids/MTX/ADA
12	♀	66	2	+	+	No	Gluteus (left)	IgG + IgM -	Aciclovir	None

TABLE General features of 12 RA patients at HZ infection

drugs, are involve in this increased risk. Furthermore, in these patients is more frequent a disseminated presentation of zoster involving several dermatomes.

Objectives: In a series of RA patients our aim was analyzed HZ infections and to assess a) HZ prevalence and b) HZ general features

Methods: Prospective Single center study of 390 RA patients included in the vaccination program of the Preventive and Rheumatology department of our hospital between october 2011 and october 2016. The follow-up was made until December 2017. HZ vaccination is not included in our program.

RA was diagnosed according to the ACR/EULAR 2010 proposed criteria (Arthritis Rheum 2010; 62: 2569–2581)

The diagnose of HZ was made according to the clinical manifestations and was confirmed by a dermatologist. These manifestations were characteristic skin rash and blisters, paresthesia and local pain, in one (localized) or more dermatomes (generalized)

Results: We studied 390 patients (307♀/83♂), average age 61.28±12.9 years that were included in the vaccination program and followed-up.

HZ infection was observed in 12 of 390 (3.07%) in the follow-up (TABLE).

The 12 RA patients (11 women/1 man) with a mean±SD age of 67.5 ±11.67. More than half of patients, 7 (58.33%) were taking corticosteroids. 8 patients (66.66%) were receiving conventional disease modifying drugs (DMARDs) methotrexate (33.33%), leflunomide (16.66%) and hydroxychloroquine (16.66%). Besides corticosteroids and conventional DMARDs, 7 patients (58.33%) were in treatment with biologic drugs, tocilizumab (n=2), etanercept (n=2), adalimumab (n=2), and rituximab (n=1).

Conclusion: Herpes zoster is a relative frequent viral infection in RA patients non-vaccine for HZ. The female sex, older age, more aggressive RA and treatment with corticosteroids were more frequent. Probably in this group of patients HZ vaccination may be useful.

Abbreviations: MTX: methotrexate, LFN: leflunomide, HCCQ: hydroxychloroquine, TCZ: tocilizumab, ADA: adalimumab, ETN: etanercept

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with a higher mortality and identification of safe and effective drugs is essential.

Objectives: Characterize lung involvement in a RA cohort; evaluate rituximab (RTX) effectiveness and safety in RA associated interstitial lung disease (ILD).

Methods: Retrospective analysis of the electronic records from RA cohort followed at University College Hospital. Lung involvement was based on high resolution computed tomography. Demographic data, smoking status, complementary exams at baseline/follow-up and therapies used were analysed. A sub-analysis of pts treated with rituximab (RTX) evaluated response at 12, 24 and 36 months. Declines of 15% in gas transfer from baseline and/or 10% in forced vital capacity were recognized.

Results: From 1129 RA pts, 87 (7.7%) had documented lung involvement. Mean age at last follow-up was 68.3±12 years, 74.7% were female and 85.1% Caucasian. Median disease duration was 14 (IQR 8-29) years. 54% of pts had erosive disease. Rheumatoid factor was positive in 88.1% and anti-citrullinated protein antibodies in 87.8%. 23 pts had positive antinuclear antibodies (25 missing data) and 4 anti-Ro, 2 anti-Scl70 and 2 anti-PL12. Secondary Sjögren's syndrome occurred in 6.9%, cutaneous rheumatoid nodules in 5.7% and cutaneous vasculitis in 1.1%. 11.5% and 43.7% were current and previous smokers, respectively. Mean interval between onset of articular and pulmonary symptoms was 12.3 years; 2 pts had lung disease as a prior manifestation. Types of lung involvement are shown in table 1.

TABLE 1 - Characterisation of different types of lung involvement

	Female	Age at lung disease diagnosis (years, mean±SD)	Interval between RA and lung disease diagnosis (years, median [IQR])	Smoking habits	Positive RF	Positive ACPA
NSIP (n=18)	11 (61.1%)	66.3±12.5	1 [0-15]	13 (76.5%; 1 missing)	16 (88.9%)	15 (88.2%; 1 missing)
UIP (n=18)	11 (61.1%)	66.8±13	1 [0-13.5]	9 (52.9%; 1 missing)	14 (87.5%; 2 missing)	16 (94.1%; 1 missing)
OP (n=4)	4 (100%)	57±7.1	10 [4.25-21]	1 (25%)	4 (100%)	4 (100%)
Unclassifiable ILD pattern (n=5)	4 (80%)	65.2±12.4	4 [2.5-8.5]	4 (80%)	5 (100%)	5 (100%)
Isolated bronchiectasis (n=31)	27 (87.1%)	63.7±9.3	17 [5.5-24.5]	14 (56%; 6 missing)	25 (83.3%; 1 missing)	23 (79.3%; 2 missing)
Obstructive bronchiolitis (n=2)	1 (50%)	74.5±3.5	30.5	1 (50%)	1 (50%)	2 (100%)
Panbronchiolitis (n=2)	2 (100%)	48.5±15.5	8.5	1 (50%)	2 (100%)	2 (100%)
Small airways disease without any specific pattern (n=1)	1 (100%)	57	4	0 (0%)	1 (100%)	1 (100%)
Rheumatoid nodules (n=4)*	4 (100%)	45.8±11.4	6.5 [2.5-15.75]	3 (75%)	4 (100%)	3 (75%)
Pleural effusion (n=3)*	2 (66.7%)	41±9.3	13	2 (66.7%)	3 (100%)	3 (100%)

*1 patient had concomitant pleural effusion and rheumatoid nodules

Legend: RF – Rheumatoid factor; ACPA – anti-citrullinated protein antibodies; NSIP – non-specific interstitial pneumonia; UIP – usual interstitial pneumonia; OP – organising pneumonia;

FRI0039 THE LUNG IN AN ENGLISH COHORT OF RHEUMATOID ARTHRITIS PATIENTS – AN OVERVIEW OF DIFFERENT TYPES OF INVOLVEMENT AND TREATMENT

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Background: Lung disease is described in 5–20% of patients (pts) with Rheumatoid arthritis (RA) and affects parenchyma, pleura, airways and vasculature; drug-induced pulmonary disease also occurs. It is associated

At last follow-up appointment 22 pts were still on methotrexate (MTX) and 27 had previously received it. MTX-acute pneumonitis occurred in 2 pts, both in the 1st year of treatment.

RTX was used in 26 pts (57.8%) with ILD (14 nonspecific interstitial pneumonia-NSIP, 8 usual interstitial pneumonia-UIP, 2 organising pneumonia-OP). The mean number of cycles was 4 (range 1-12). Two pts were concomitantly receiving mycophenolate mofetil and 1 azathioprine. RTX treatment outcomes are shown in table 2.

TABLE 2. – Disease outcomes after treatment with rituximab

Time of reevaluation ILD pattern	6 months			12 months			24 months			36 months		
	OP	NSIP	UIP	OP	NSIP	UIP	OP	NSIP	UIP	OP	NSIP	UIP
TLCO stable/ improvement	2/2 100%	3/4 75%		2/2 100%	5/5 100%	1/3 33.3%	1/1 100%	5/5 100%	1/1 100%		3/3 100%	2/2 100%
TLCO decline		1/4 25%	1/1 100%			2/3 66.7%						
FVC stable/ improvement	2/2 100%	3/4 75%		2/2 100%	5/5 100%	1/3 33.3%	1/1 100%	5/5 100%	1/1 100%		4/4 100%	1/2 50%
FVC decline		1/4 25%	2/2 100%			2/3 66.7%						1/2 50%
HRCT stable/ improvement		2/2 100%			1/1 100%	1/1 100%		3/3 100%			2/2 100%	
HRCT worsening									1/1 100%			

Legend: ILD – interstitial lung disease; TLCO – gas transfer; FVC – forced vital capacity; HRCT – high resolution computed tomography; NSIP – non-specific interstitial pneumonia; UIP – usual interstitial pneumonia; OP – organising pneumonia

There were 18 (20.7%) deaths, 7 of them related to ILD (4 UIP, 3 NSIP) and occurred 8.8 years after ILD diagnosis. Two were due to infection, but none was felt to be directly related to immunosuppressive therapy.

Conclusion: Lung disease occurred in 7.7% of our cohort, with ILD being the commonest presentation (51.7%). MTX was widely used in pts with lung disease with only 2 cases of acute pneumonitis. Although the number of ILD pts treated with RTX was small, the drug improved/stabilized the disease in most NSIP and OP pts. UIP is usually progressive, but our data suggest that disease progression might be put on hold with RTX, at least in a subset of pts.

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FRI0040

GENDER DISCREPANCY IN RHEUMATOID ARTHRITIS: PATIENTS' AND PHYSICIANS' PERSPECTIVE

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Background: Rheumatoid Arthritis (RA) is more prevalent among female individuals. Sex and gender differences may influence disease's progression and prognosis. To date, the influence of physicians' gender in the evaluation of RA activity is still largely unknown.

Objectives: aim of the study was to investigate a possible discrepancy in the assessment of disease activity in RA patients evaluated by male and female physicians. Further aim was to compare patient and evaluator perceptions about disease activity and global health status.

Methods: we enrolled consecutive RA patients. Each patient was separately visited by a female and a male rheumatologist of the same age and training level. Tender (TJ) and swollen joints (SJ) count was performed. Global Health (GH), physician's (E-VAS) and patient's (P-VAS) disease activity were reported using a visual analogue scale (VAS 0–100). Both examiners were blinded on ESR and CRP. A third rheumatologist assessed disease activity by DAS28-ESR, CDAI and SDAI.

Results: we enrolled 154 patients (122 F, 32 M). GH and P-VAS were significantly higher when collected by the female examiner compared to the male one (respectively, 41.1 ± 24.4 vs 36.1 ± 24.3 , $p < 0.0001$ and 41.7 ± 26.2 vs 35.3 ± 25.4 ; $p < 0.0001$; figure 1), as well as DAS28-ESR values (3.19 ± 1.5 vs 2.97 ± 1.5 ; $p < 0.0001$; figure 2) but not CDAI and SDAI. On the contrary, male E-VAS was significantly higher compared to female one (26.8 ± 27 vs 20.5 ± 20.8 ; $p < 0.0001$; figure 1). GH, P-VAS and DAS28 significantly differ when the analysis was restricted to female

patients ($p < 0.0001$); among male patients, only P-VAS was significantly higher when collected by the female examiner (36.5 ± 24.7 vs 30.4 ± 25.4 ; $p < 0.0001$). According to the DAS28-ESR cut off, 39.6% of patients were in remission when evaluated by the female examiner compared to 42.9% when examined by the male physician; the probability of being judged as having an active disease was not different between the female and the male examiner ($p = ns$). Overall, the agreement between the female and male evaluation of disease activity was high [Intraclass correlation coefficient (ICC-K) 0.92 for GH; 0.81 for E-VAS; 0.89 for P-VAS; 0.95 for DAS28-ESR; $p < 0.0001$]. When comparing patient and examiner perception of the disease activity, P-VAS values were significantly higher than E-VAS in both female and male examiners (41.7 ± 26.2 vs 20.5 ± 20.8 ; 35.3 ± 25.4 vs 26.8 ± 27.1 ; $p < 0.0001$; figure 3). The general agreement between male and female examiner and the whole patient population was moderate (K 0.65 and 0.62, respectively; $p < 0.0001$), with the lowest agreement between female patients and male examiner (K 0.58; $p < 0.0001$). Female physician had an higher agreement with both male and female patients (K 0.78, K 0.62 respectively; $p < 0.0001$).

Conclusion: subjective measure of global health status and disease activity (GH, P-VAS) are generally higher when collected by a female examiner compared to a male one, especially among female patients. This gender discrepancy in subjective measures could influence the evaluation of disease activity indices; however, this does not affect the probability of being defined in remission. Overall, patients have a higher perception of disease activity compared to the health care providers, and the agreement between physician and patients is only moderate, with female patients having the worst perception. Female physician tend to be more in agreement with the patients' judgement of disease activity maybe because of a more emphatic setting established by the female health care provider.