strategies for preventing or delaying the occurrence of frailty, disability, and work disability in people with OA and RA.

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OP0266

RISK OF HOSPITALIZED INFECTION IN PATIENTS WITH CHRONIC INFLAMMATORY ARTHRITIS TREATED WITH BIOLOGICAL DRUGS – A MATCHED COHORT STUDY

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Background: Patients with rheumatoid arthritis (RA), axial spondyloarthritis (axSpA) and psoriatic arthritis (PsA) treated with biological drugs (bDMARDs) have increased risk of hospitalized infection (i.e. infection causing admission to hospital) compared to the general population. Since patients with RA, axSpA and PsA have different age distributions, and age is an important predictor for infection, we found it of interest to quantify the excess burden of hospitalized infection in patients with inflammatory arthritis treated with bDMARDs compared to the general population and to investigate whether risk depended on age and diagnosis.

Objectives: To compare the risk of hospitalized infection in bio-naïve patients with inflammatory arthritis, who started treatment with a bDMARD with that of the general population, and to explore how this risk was influenced by age and diagnosis.

Methods: Matched cohort study based on data from The Danish Rheumatology Register (DANBIO) linked with The Danish National Patient Register and The Danish National Prescription Register. Patients with a diagnosis of RA, PsA or axSpA in DANBIO initiating first bDMARD January 2006-December 2016 were included. For each patient, 10 controls from the general population, matched by age, sex, postal code and date were obtained. Infection risk in patients and matched controls were compared in analyses stratified by age and diagnosis, with Cox proportional hazards models accounting for matching. Follow-up time was 12 months irrespective of whether treatment was continued or changed during follow-up. Clinicaltrials.gov: NCT03496831.

Results: In total, 11,372 patients and 113,715 controls were included. Overall, hospitalized infection was observed during follow-up in 4.6% of patients and 1.3% of controls; hazard ratio 3.7 (95% confidence interval (CI): 3.4-4.1).

Table 1. Baseline characteristics and risk of hospitalized infection.

	RA		AxSpA		PsA	
	Patients (n=5985)	Matched cohort (n=59848)	Patients (n=2958)	Matched cohort (n=29579)	Patients (n=2429)	Matched cohort (n=24288)
Age <40	11.9%	11.9%	49.6%	49.6%	29.0%	29.0%
40-49	16.9%	16.9%	26.5%	26.5%	28.1%	28.1%
50-59	28.9%	28.9%	16.0%	16.0%	28.0%	28.0%
≥60	42.3%	42.3%	7.9%	7.9%	14.9%	14.9%
Men	25.0%	25.0%	60.9%	60.9%	45.6%	45.6%
No. of persons with hospitalized infection during 12 months of follow-up	352	880	81	292	89	262
Absolute risk of hospitalized infection during 12 months of follow-up (95% CI)	5.9% (5.3-6.5%)	1.5% (1.4-1.6%)	2.7% (2.2-3.4%)	1.0% (0.9-1.1%)	3.7% (3.0-4.5%)	1.1% (1.0-1.2%)

The absolute risk was highest in RA patients, followed by PsA, axSpA and controls (unadjusted comparison). When stratified by age, the absolute risk increased with age, but was largely similar across diagnoses (Figure). In the stratum ≥60 years, RA patients appeared to have higher risk than axSpA patients, but the subgroup of axSpA patients ≥60 years was small.

Conclusion: The risk of hospitalized infection during 12 months of follow-up was approximately four times higher in bio-naïve patients with inflammatory arthritis who started treatment with a biological drug (bDMARD) compared to matched controls from the general population. When stratified by age, the absolute risk was largely similar across the diagnoses RA, axSpA and PsA. Thus, attention to preventive strategies such as vaccination seems prudent in these patients, especially those ≥60 years of age.

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OP0267

INACTIVATED INFLUENZA VACCINATION DOES NOT ASSOCIATE WITH DISEASE FLARES IN AUTOIMMUNE RHEUMATIC DISEASES: A SELF-CONTROLLED CASE SERIES STUDY USING DATA FROM THE CLINICAL PRACTICE RESEARCH DATALINK

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Background: Concerns about vaccination with the seasonal flu vaccine associating with increased risk of autoimmune rheumatic disease (AIRD) activity, and anecdotal reports of the seasonal flu vaccine triggering diseases such as vasculitis are barriers to flu vaccination in this population¹⁻². This is despite reports of stable disease activity following flu vaccination provided disease modifying anti-rheumatic drug therapy is continued in the peri-vaccination period³. Previous studies generally include patients with stable disease activity, and as far as we are aware, a real world study evaluating the association between inactivated influenza vaccine (IIV) administration and AIRD activity has not been conducted.

Objectives: To examine the association between IIV administration and primary care consultation for joint pain, fatigue, rheumatoid arthritis (RA) flare, corticosteroid prescription, and incident vasculitis in people with AIRDs.