Table 1. Comorbidities that were more prevalent in RA cases than controls at the time of baseline survey*

Comorbidity	N (%)		p-value
	RA cases (N = 821)	Controls (N = 2455)	
Osteoarthritis	370 (50)	915 (38)	< 0.001
Fibromyalgia	114 (15)	144 (6)	< 0.001
Autoimmune disorder	123 (16)	95 (4)	< 0.001
Epilepsy	22 (3)	29 (1)	0.003
Cataracts	278 (35)	699 (29)	0.003
Myocardial infarction	63 (8)	88 (4)	< 0.001
COPD	47 (6)	88 (4)	< 0.001
Sleep apnea	164 (20)	352 (15)	< 0.001
Pulmonary fibrosis	16 (2)	10 (0.4)	< 0.001
Gastroesophageal reflux disease	304 (38)	675 (28)	< 0.001
Inflammatory bowel disease	37 (5)	40 (2)	< 0.001

*significance threshold was set at $p < 0.01$ given multiple comparisons

COPD = chronic obstructive pulmonary disease

Conclusion: Many comorbidities were associated with RA, including several potentially novel comorbidities such as COPD, epilepsy, and acid reflux. RA was not associated with an increased risk of cancer. The increased occurrence of inflammatory bowel disease and type 1 diabetes prior to RA suggests either a predisposition to RA development or a shared immunological defect, meriting further study.

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OP0089

METABOLIC SYNDROME IS COMMON AROUND THE TIME OF EARLY RHEUMATOID ARTHRITIS DIAGNOSIS AND ASSOCIATIONS VARY BY SEX AND MENOPAUSAL STATUS: RESULTS FROM THE CANADIAN EARLY ARTHRITIS COHORT

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Background: Prevalence studies of metabolic syndrome (MetS) in early rheumatoid arthritis (ERA) are sparse and estimates are variable. Differences by sex and menopausal status have not been formally assessed.

Objectives: We estimated prevalence and factors associated with MetS in ERA patients treated in routine practice settings. Variations by sex, and by menopausal status were also examined.

Methods: Cross-sectional data were analyzed from patients meeting 1987 or 2010 ACR/EULAR RA criteria enrolled in the Canadian Early Arthritis Cohort (CATCH) from January 2007-March 2017. CATCH is a prospective multicenter observational study of patients diagnosed and treated for early inflammatory arthritis (symptoms < 1 year) by a rheumatologist. Participants completed standardized clinical assessments and patient-reported outcome measures. Laboratory testing of metabolic parameters was encouraged, but left to the discretion of the rheumatologist. MetS was defined according to modified WHO criteria¹ as ≥ 2 of the following: body mass index (BMI) ≥ 30 , hypertension, low high-density lipoprotein (HDL) cholesterol, dyslipidemia, or impaired glucose intolerance (IGT)¹. Univariate and multivariable logistic regression was used to estimate crude and adjusted associations between baseline demographic, clinical and lifestyle variables with prevalent MetS in men and in women, respectively.

Results: The sample included 1543 participants; 71% were female and mean (SD) age was 54 (15) years. 476 (31%) of the total sample met criteria for MetS. Participants with MetS were older, more frequently past smokers and reported more comorbid conditions, including cardiovascular disease (CVD) ($p < 0.0001$).

MetS prevalence was higher in men (42%) than women (26%, $p < 0.0001$) and higher in post-menopausal (33%) vs. pre-menopausal women (15%, $p < 0.0001$). Post-menopausal women had a higher frequency of hypertension (65%), IGT (32%) and dyslipidemia (21%) compared to pre-menopausal women ($p < 0.001$). In multivariable logistic regression MetS was negatively associated with seropositivity and pulmonary disease in men; with corticosteroid use in menopausal women; and with psychiatric comorbidity in pre-menopausal women.

Conclusion: Approximately 1 in 3 ERA patients met criteria for MetS. Though men had a higher prevalence of MetS and individual MetS components, post-menopausal women had a similar MetS profile as men, and should equally be considered high risk for CVD development. Characteristics and associations with MetS differed in men and women suggesting sex-specific variations are important considerations for comorbidity screening and surveillance of CVD outcomes in ERA.

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OP0090

THE OCCURRENCE OF SUBCLINICAL AND CLINICAL ATHEROSCLEROSIS IN RHEUMATOID ARTHRITIS, RESULTS FROM THE 3-YEAR, MULTICENTER, PROSPECTIVE, OBSERVATIONAL, GIRRCS STUDY

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Background: The systemic inflammatory process and the "traditional" cardiovascular (CV) risk factors could synergize the enhancement of CV burden in rheumatoid arthritis (RA) [1].