AB0392

RHEUMATOID ARTHRITIS AND RISK OF INCIDENT CHRONIC KIDNEY DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS OF COHORT STUDIES

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Background: Patients with rheumatoid arthritis (RA) may have a higher risk of developing chronic kidney disease (CKD) compared with general population. However, the data on this risk are limited and not well-characterised.

Objectives: This systematic review and meta-analysis aimed to comprehensively investigate the risk of incident CKD among patients with RA by reviewing all available studies.

Methods: A systematic review was performed using MEDLINE and EMBASE database from inception to December 2017 to identify all cohort studies (either retrospective or prospective) that compared the risk of incident CKD in patients with RA versus individuals without RA. Adjusted point estimates were extracted from individual studies and the pooled risk ratio and 95% confidence interval (CI) were calculated using random-effect, generic inverse-variance method of DerSimonian and Laird. Visualisation of funnel plot was used for evaluation for publication bias.

Results: A total of 4 retrospective cohort studies with 1,627,981 participants were included. The risk of incident CKD was significantly increased among patients with RA with the pooled risk ratio of 1.52 (95% CI, 1.28–1.80). The statistical heterogeneity of this study was high with an I^2 of 82%. The forest plot of this systematic review and meta-analysis is shown as figure 1. The funnel plot was relatively symmetric and, thus, did not suggest the presence of publication bias in favour of positive studies.

Abstract AB0392 – Figure 1. Forest plot of the meta-analysis on the risk of CKD among patients with RA

Abbreviation: SE, standard error; IV, inverse variance; CI, confidence interval, RA, rheumatoid arthritis; CKD, chronic kidney disease

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AB0393

ELECTROCARDIOGRAPHIC DISTURBANCES IN PATIENTS WITH RHEUMATOID ARTHRITIS USING ANTIMALARIAL DRUGS

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Background: Cardiac involvement is present in 7% to 35% of patients with rheumatoid arthritis (RA). Anecdotal case series have associated the use of antimalarial drugs with the presence of electrocardiographic disturbances in patients with RA

Objectives: To assess whether the use of antimalarial drugs is associated with the presence of electrocardiographic abnormalities in RA patients. The main clinical associations were also evaluated

Methods: A single-centre, case-control (1:1 proportion) medical chart review study was performed. A total of 144 patients with RA (ACR/EULAR 2010 criteria) were studied, and grouped as follows: 72 with a history of antimalarial drug use (case) and 72 who never used antimalarial drugs (control). We excluded individuals with a history of ischaemic heart disease or an already diagnosed disturbance of the cardiac rhythm/conduction.

Results: A total of 37 cases of electrocardiographic disturbances were found in patients receiving antimalarials (51%), but only 18 cases (25%) in the control group ($p=0.001$), giving an odds ratio (OR) of 3.17 (95% CI, 1.57 to 6.42). Rhythm disturbances observed in the antimalarial group were: left anterior branch hemiblock ($n=12$, 32.4%), right branch block ($n=10$; 27.02%), 1st degree AV block ($n=5$; 13.5%), bifascicular block ($n=4$; 10.8%), posterior hemiblock of the left branch ($n=3$; 8.1%), incomplete left bundle branch block ($n=2$, 5.4%), and left bundle branch block ($n=1$, 2.7%). Right bundle branch block was the only statistically significant conduction disorder (27.02% vs 5.5% with p value of 0.004 [OR 11.45 1.43–92]).

The average dose of hydroxychloroquine was 3.02 ± 0.41 mg/kg, while the dose of chloroquine was 2.23 ± 0.13 mg/kg. A history of prednisone consumption also was associated with an increased risk to present an electrical cardiac disturbance ($p=0.005$; OR 9.73, from 2.00 to 47.32).

Abstract AB0393 – Table 1

Outcomes	Antimalarial (n=72)	No Antimalarial (n=72)	p	OR (IC 95%)
Cardiac conduction electrocardiographic abnormalities	37	18	0.001	3.17 (1.57–6.42)
1st Degree AV Blocking	5	1	0.095	5.3 (0.6–46.54)
Left Branch Block	1	5	0.095	0.19 (0.02–1.66)
Right Branch Block	10	1	0.004	11.45 (1.43–92)
IBRB	0	1	0.315	-
IBLB	2	1	0.559	2.03 (0.18–22.88)
AHLB	12	5	0.070	2.68 (0.89–8.05)
PHLB	3	0	0.080	-
Bifascicular block	4	4	1.000	1 (0.24–4.16)

Conclusions: In this study, the use of antimalarial drugs was associated with an increased risk to present disturbances of the cardiac rhythm/conduction in patients with established RA.

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AB0394

OBSERVATIONAL STUDY OF THE INCIDENCE OF CARDIOVASCULAR EVENTS AND ASSOCIATED COMORBIDITIES IN A COHORT OF PATIENTS WITH RECENT ONSET RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a systemic autoimmune disease whose main characteristic is persistent joint inflammation that results in joint damage and loss of function, and can involve other tissues and organs (extra-articular manifestations).^{1, 2} RA is associated with a high risk of morbidity and premature death secondary to the earlier development of cardiovascular, lung diseases and malignancy, being cardiovascular disease secondary to accelerated atherosclerosis the main cause of morbidity and mortality in these patients.^{3, 4}

Objectives: Main objective: To calculate the incidence of comorbidities and CV events in patients with recent onset RA. Secondary objectives: To determine the clinical disease features according to baseline RA profile. To analyse the relationship between CV event and the different variables. To describe classic CV risk factors evolution throughout the follow-up.

Methods: We conducted a retrospective longitudinal observational study of 70 patients with recent onset RA according to ACR/EULAR 2010 or ACR 1987 criteria, at 5 years of follow-up. A descriptive study of the variables was carried out. For the bivariate analysis, the Chi-square test was used for the qualitative variables and the Mann Whitney U test for the independent quantitative ones. For the paired data, the McNemar test was used for the qualitative variables and T Student for the quantitative ones. A logistic regression model was used to associate the main variable with the rest of the variables. Finally, the analysis of survival and regression of COX was carried out. All the contrasts were bilateral and were considered significant when $p < 0.05$. The statistical analysis was performed using SPSSV17.

Results: The incidence of CV event was 18.57% (31% acute myocardial infarction). During follow-up, an improvement in inflammatory and quality of life