Reviewer's report

Title: Increased risk for chronic comorbid disorders in patients with inflammatory arthritis: a population based study

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Reviewer: Gillian Caughey

Reviewer's report:

This is an interesting study examining the risk of developing new comorbid chronic conditions in patients with inflammatory arthritis by comparison to those without.

Major Compulsory Revisions

My main concern is with the study design with regard to matching of controls for time of follow up. If there are differences between the two groups with the time of follow up this could potentially bias the results, increased follow up means greater opportunity to develop new conditions. Are the authors able to match on follow up time or conduct a survival analysis that would account for time within the study between the two groups? the sensitivity analysis limiting to at least one year, does not address this given the potential for at least 9 years follow up at maximum. A sense of the time to development of first new condition would also be useful.

I would also like the authors to provide some comment on the increased risk of specific disease groupings, in terms of those conditions that may be considered ‘concordant’ or discordant with inflammatory arthritis. i.e. those with RA are known to have an increased risk of CVD.

The increased risk of HF may be attributed to the use of NSAIDs in this population? Some discussion on this is required.

Minor Essential Revisions

Introduction

The second to last paragraph - a lack of optimal preventative care and the subsequent development of comorbid conditions could really be said for any ‘index’ chronic condition, not just IA. You should maybe introduce the concept about the development of new comorbid conditions and their influence on overall care, management of the patient, treatment decisions and complexity and likelihood of treatment prioritisation.

The aim could be clearer. The aim of this study is to determine the risk of development of new comorbid chronic conditions in patients newly diagnosed with IA…..

Discussion
How do you propose that preventative treatment will stop the development of new conditions. Given the average age is 55 years then this seems unlikely for COPD given its development over time as an example.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.