

The CRA (CIORA) TAS Clinician Investigator Award: Summary of Funded Work

**Recipient of the 2015-17 CRA (CIORA) TAS
Clinician Investigator Award:**
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Individuals with inflammatory arthritis experience significant psychological burden related to their illness. Mood disorders can negatively affect the disease course (*i.e.*, treatment response, treatment adherence) and significantly impact quality of life.

Rheumatoid arthritis (RA) and ankylosing spondylitis (AS) are the prototypical seropositive and seronegative conditions, each with differing clinical presentations and epidemiology. RA and AS are both associated with an increased risk of anxiety and depression. However, there are limited data on the risk of serious sequelae of mental illness, such as hospitalizations or deliberate self-harm attempts, for individuals living with RA or AS.

Our group was interested in studying this important clinical question. With the support of the CRA (CIORA) TAS Clinician Investigator Award, (on behalf of CIORA and The Arthritis Society [TAS]), we conducted two, retrospective, population-based cohort studies. We analyzed administrative health data for the province of Ontario between April 1, 2002, and March 31, 2014. Individuals with incident RA (N=53,240) and AS (N=13,964) were separately matched 1:4 by age, sex, and calendar year with comparators without RA or AS. We estimated hazard ratios (HR) and 95% confidence intervals (95% CI) for the risk of a first deliberate self-harm attempt (measured as emergency department presentations) in subjects with RA and AS compared to unaffected comparators, adjusting for demographic, clinical and health service utilization variables. We found that indi-



viduals with AS were significantly more likely to deliberately self-harm (crude incidence rate [IR] of 0.68/1,000 person-years [PY] versus 0.32/1,000 PY in comparators), with an adjusted HR of 1.59 (95% CI 1.156- 2.21). Deliberate self-harm was also increased for RA patients (IR 0.35/1,000 PY) versus comparators (IR 0.24/1,000 PY) before covariate adjustment (HR 1.43, 95% CI 1.16-1.75), but not after (HR 1.08, 95% CI 0.87-1.34).

From this preliminary work, we conclude that a diagnosis of AS, but not RA, carries a small, but significantly increased risk, for deliberate self-harm. Future efforts should focus on the characteristics of at-risk AS subjects and the health settings in which they seek care for mental illness to inform specific risk-reduction strategies. Additional work evaluating the types and patterns of mental health care use in RA and AS is ongoing and will help determine if targeted clinical or health policy interventions are needed in the care of patients with inflammatory arthritis.

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You are invited to submit abstracts for presentation during the 2019 CRA Annual Scientific Meeting and AHPA Annual Meeting!

Deadline for submissions is October 12, 2018.

Details will be available at www.rheum.ca.