

DSEN ABSTRACT

Disease-modifying anti-rheumatic drugs in ankylosing spondylitis

Summary

- We evaluated the risk of hospitalized infection among initiators of disease-modifying anti-rheumatic drugs (DMARDs) and/or anti-tumour necrosis factor (anti-TNF) agents in ankylosing spondylitis (AS).

Key messages

- We did not find clear evidence that AS patients initiating DMARDs and/or anti-TNF agents are in higher risk of hospitalized infection. Because of scarce published literature on the risk of infection in AS patients, our results have important implications for clinicians.

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What is the issue?

- Ankylosing spondylitis (AS) is a serious inflammatory arthritis that requires immune-suppressing treatment to avoid disability. Anti-tumour necrosis factor- α (anti-TNF- α) therapy may provide substantial benefits for AS patients. However, since the drug is a potent immune suppressor, concerns exist regarding infections associated with anti-TNF use in AS.

What was the aim of the study?

- To assess the risk of hospitalized infection among initiators of disease-modifying anti-rheumatic drugs (DMARDs) and/or anti-TNF agents in AS.

How was the study conducted?

- CAN-AIM conducted a population-based cohort study of AS patients in Quebec (QC), focussing on new users of anti-TNF drugs and/or DMARDs between 2001 and 2011.
- We used Cox proportional hazards regression models with three time-varying drug exposures: current use of DMARDs without anti-TNF, current use of anti-TNF agents alone or in combination with DMARDs (anti-TNF \pm DMARDs), and current non-use. The outcome measure was severe infection defined on the basis of hospitalization discharge diagnoses (primary or non-primary).

What did the study find?

- We found no clear evidence that the risk of hospitalized infection was linked to DMARD and/or anti-TNF drug use.
- Prior high use of healthcare, corticosteroids, and previous hospitalized infections were associated with higher infection risk in AS. These factors thus represent subsets of individuals with the greatest infection risk.

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