



Risk of first and recurrent serious infection in sarcoidosis: a Swedish register-based cohort study

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Sarcoidosis is associated with an increased risk of serious infections, especially during the first 2 years after diagnosis. Patients in need of immunosuppressants around diagnosis are twice as likely to develop serious infections than those who do not. <https://bit.ly/2VFOvSo>

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ABSTRACT Serious infections impair quality of life and increase costs. Our aim was to determine if sarcoidosis is associated with a higher rate of serious infection and whether this varies by age, sex, time since diagnosis or treatment status around diagnosis.

We compared individuals with sarcoidosis (at least two International Classification of Diseases codes in the Swedish National Patient Register 2003–2013; n=8737) and general population comparators matched 10:1 on age, sex and residential location (n=86 376). Patients diagnosed in 2006–2013 who were dispensed at least one immunosuppressant \pm 3 months from diagnosis (Swedish Prescribed Drug Register) were identified. Cases and comparators were followed in the National Patient Register for hospitalisations for infection. Using Cox and flexible parametric models, we estimated adjusted hazard ratios (aHR) and 95% confidence intervals for first and recurrent serious infections (new serious infection >30 days after previous).

We identified 895 first serious infections in sarcoidosis patients and 3881 in comparators. The rate of serious infection was increased 1.8-fold in sarcoidosis compared to the general population (aHR 1.81, 95% CI 1.65–1.98). The aHR was higher in females than males and during the first 2 years of follow-up. Sarcoidosis cases treated with immunosuppressants around diagnosis had a three-fold increased risk, whereas nontreated patients had a 50% increased risk. The rate of serious infection recurrence was 2.8-fold higher in cases than in comparators.

Serious infections are more common in sarcoidosis than in the general population, particularly during the first few years after diagnosis. Patients who need immunosuppressant treatment around diagnosis are twice as likely to develop a serious infection than those who do not.