Cardiac sarcoidosis: systematic review of the literature on corticosteroid and immunosuppressive therapies

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Shareable abstract (@ERSpublications)
Corticosteroids are the mainstay treatment for cardiac sarcoidosis. Conventional immunosuppressive agents might be of interest at diagnosis. Cohort studies are clearly heterogeneous. Large cohort and prospective studies using "strong" end-points are lacking. https://bit.ly/3t9Rv8O

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Abstract

Background Cardiac sarcoidosis (CS) is a life-threatening condition in which clear recommendations are lacking. We aimed to systematically review the literature on cardiac sarcoidosis treated by corticosteroids and/or immunosuppressive agents in order to update the management of CS.

Methods Using PubMed, Embase and Cochrane Library databases, we found original articles on corticosteroid and standard immunosuppressive therapies for CS that provided at least a fair Scottish Intercollegiate Guidelines Network (SIGN) overall assessment of quality and we analysed the relapse rate, major cardiac adverse events (MACEs) and adverse events. We based our methods on the PRISMA statement and checklist.

Results We retrieved 21 studies. Mean quality provided by SIGN assessment was 6.8 out of 14 (range 5–9). Corticosteroids appeared to have a positive impact on left ventricular function, atrioventricular block and ventricular arrhythmias. For corticosteroids alone, nine studies (45%, n=351) provided data on relapses, representing an incidence of 34% (n=119). Three studies (14%, n=73) provided data on MACEs (n=33), representing 45% of MACEs in patients treated by corticosteroid alone. Nine studies provided data on adjunctive immunosuppressive therapy, of which four studies (n=78) provided data on CS relapse, representing an incidence of 33% (n=26). Limitations consisted of no randomised control trial retrieved and unclear data on MACEs in patients treated by combined immunosuppressive agents and corticosteroids.

Conclusion Corticosteroids should be started early after diagnosis but the exact scheme is still unclear. Studies concerning adjunctive conventional immunosuppressive therapies are lacking and benefits of adjunctive immunosuppressive therapies are unclear. Homogenous data on CS long-term outcomes under corticosteroids, immunosuppressive therapies and other adjunctive therapies are lacking.