We performed a nationwide retrospective multicenter study in internal medicine, rheumatology and pulmonology departments. Patients were identified between 2000 and 2015 in participant centers through local databases with the help of the GSF (Groupe Sarcoïdose Francophone, a multi-disciplinary French national network working on sarcoidosis). The patients were identified through local databases.

Fifty-six patients were screened and 48 were included in the final analysis. Two patients were excluded because there had no histological proof of sarcoidosis. One patient was excluded because he had no clinical symptom or sign of muscular involvement despite the presence of granuloma in muscular biopsy. One patient was excluded because he had a Löfgren presentation with nodular lesions of lower limbs without biological or imaging sign of muscular disease. Additionally, 4 sarcoidosis patients were excluded because the results of muscular biopsies were not consistent with muscular involvement of sarcoidosis: one patient, who was infected by the human immunodeficiency virus, had elevated CK and normal muscular biopsy. Two patients, treated with corticosteroids and presenting with mild motor proximal deficit, normal creatin kinase (CK) level and mild myopathic changes in electrophysiological study had normal muscular biopsies. Finally, another patient with sarcoidosis and motor deficits had a muscular biopsy showing histological pattern of autoimmune necrotizing myopathy without granuloma: this patient was also further excluded of the analysis. Finally, 48 patients were analyzed in this study.