A case control etiologic study of sarcoidosis: environmental and occupational risk factors


Author information

• 1National Jewish Medical and Research Center and University of Colorado Health Sciences Center, Denver, CO 80206, USA. newmanL@njc.org

Abstract

Past research suggests that environmental factors may be associated with sarcoidosis risk. We conducted a case control study to test a priori hypotheses that environmental and occupational exposures are associated with sarcoidosis. Ten centers recruited 706 newly diagnosed patients with sarcoidosis and an equal number of age-, race-, and sex-matched control subjects. Interviewers administered questionnaires containing questions regarding occupational and nonoccupational exposures that we assessed in univariable and multivariable analyses. We observed positive associations between sarcoidosis and specific occupations (e.g., agricultural employment, odds ratio [OR] 1.46, confidence interval [CI] 1.13-1.89), exposures (e.g., insecticides at work, OR 1.52, CI 1.14-2.04, and work environments with mold/mildew exposures [environments with possible exposures to microbial bioaerosols], OR 1.61, CI 1.13-2.31). A history of ever smoking cigarettes was less frequent among cases than control subjects (OR 0.62, CI 0.50-0.77). In multivariable modeling, we observed elevated ORs for work in areas with musty odors (OR 1.62, CI 1.24-2.11) and with occupational exposure to insecticides (OR 1.61, CI 1.13-2.28), and a decreased OR related to ever smoking cigarettes (OR 0.65, CI 0.51-0.82). The study did not identify a single, predominant cause of sarcoidosis. We identified several exposures associated with sarcoidosis risk, including insecticides, agricultural employment, and microbial bioaerosols.

PMID: 15347561