



Lung transplantation for sarcoidosis: outcome and prognostic factors

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Post-transplant survival in patients with pulmonary sarcoidosis was similar to that in patients with other indications for lung transplantation. The main factors associated with worse survival were older age and extensive pre-operative lung fibrosis. <https://bit.ly/2XBfJd6>

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Abstract

Study question In patients with sarcoidosis, past and ongoing immunosuppressive regimens, recurrent disease in the transplant and extrapulmonary involvement may affect outcomes of lung transplantation. We asked whether sarcoidosis lung phenotypes can be differentiated and, if so, how they relate to outcomes in patients with pulmonary sarcoidosis treated by lung transplantation.

Patients and methods We retrospectively reviewed data from 112 patients who met international diagnostic criteria for sarcoidosis and underwent lung or heart–lung transplantation between 2006 and 2019 at 16 European centres.

Results Patient survival was the main outcome measure. At transplantation, median (interquartile range (IQR)) age was 52 (46–59) years; 71 (64%) were male. Lung phenotypes were individualised as follows: 1) extended fibrosis only; 2) airflow obstruction; 3) severe pulmonary hypertension (sPH) and airflow

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obstruction; 4) sPH, airflow obstruction and fibrosis; 5) sPH and fibrosis; 6) airflow obstruction and fibrosis; 7) sPH; and 8) none of these criteria, in 17%, 16%, 17%, 14%, 11%, 9%, 5% and 11% of patients, respectively. Post-transplant survival rates after 1, 3, and 5 years were 86%, 76% and 69%, respectively. During follow-up (median (IQR) 46 (16–89) months), 31% of patients developed chronic lung allograft dysfunction. Age and extended lung fibrosis were associated with increased mortality. Pulmonary fibrosis predominating peripherally was associated with short-term complications.

Answer to the study question Post-transplant survival in patients with pulmonary sarcoidosis was similar to that in patients with other indications for lung transplantation. The main factors associated with worse survival were older age and extensive pre-operative lung fibrosis.