Cochrane Database of Systematic Reviews - - Cochrane Review

Immunosuppressive drug therapy for preventing rejection following lung transplantation in cystic fibrosis

Code: CD009421 **Year:** 2018 **Date:** 2013 - updated: 29 MAY 2018 **Author:** Saldanha IJ

Study design (if review, criteria of inclusion for studies)

Randomised or quasi-randomised controlled trials. Studies which either include patients with CF exclusively or which include at least some patients with CF.

List of included studies (0)

No studies were included in this review.

Participants

Individuals with CF following lung transplantation (including lobe, single-lung, and bilateral transplants) or heart-lung transplantation.

Interventions

individual drugs (e.g. cyclosporine (CsA), tacrolimus (Tac), sirolimus (rapamycin), mycophenolate mofetil (MMF)) or combinations of individual drugs vs placebo or other individual drugs or combinations of individual drugs and comparisons of two drugs within the same class (e.g. daclizumab versus basiliximab).

Outcome measures

Primary outcomes: episodes of rejection (hyperacute, acute and chronic rejection), mortality, QoL

Main results

While five studies addressed the interventions of interest, we did not include them in the review because the investigators of the studies did not report any information specific to people with cystic fibrosis. Our attempts to obtain this information have not yet been successful. We will include any provided data in future updates of the review.

Authors' conclusions

The lack of currently available evidence makes it impossible to draw conclusions about the comparative efficacy and safety of the various immunosuppressive drugs among people with cystic fibrosis after lung transplantation. A 2013 Cochrane Review comparing tacrolimus with cyclosporine in all lung transplant recipients (not restricted to those with cystic fibrosis) reported no significant difference in mortality and risk of acute rejection. However, tacrolimus use was associated with lower risk of bronchiolitis obliterans syndrome and arterial hypertension and higher risk of diabetes mellitus. It should be noted that this wider review contained only a small number of included studies (n = 3) with a high risk of bias. Additional randomised studies are required to provide evidence for the benefit and safety of the use of immunosuppressive therapy among people with cystic fibrosis after lung transplantation.

http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009421.pub4/abstract

See also

Saldanha IJ, Akinyede O, Robinson KA. Immunosuppressive drug therapy for preventing rejection following lung transplantation in cystic fibrosis. Cochrane Database of Systematic Reviews 2018, Issue 6. Art. No.: CD009421. DOI: 10.1002/14651858.CD009421.pub4.

Keywords

Adolescent; Adult; Immunosuppressive Agents; Immunoregulatory; Lung Transplantation; pharmacological_intervention; transplantation; non pharmacological intervention - surg; Tacrolimus; Mofetil; Mycophenolate; Rapamycin; Basiliximab;