Cochrane Database of Systematic Reviews - - Cochrane Review

Chemical pleurodesis versus surgical intervention for persistent and recurrent pneumothoraces in cystic fibrosis

Code: CD007481 **Year:** 2012 **Date:** 2012 - updated: 5 DEC 2012 **Author:** Amin Reshma

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

Randomised and quasi-randomised controlled trials which compared the use of chemical pleurodesis to surgical interventions for the treatment of persistent and recurrent pneumothoraces in CF.

Participants

Children and adults diagnosed with CF as defined by two or more clinical features of CF and a documented sweat chloride greater than 60 milliequivalent per liter (mEq/L) by quantitative pilocarpine iontophoresis test or a genotype showing two well-characterized disease-causing mutations. Participants have also been diagnosed with either spontaneous persistent (if the air leak is ongoing for more than five days) or spontaneous recurrent pneumothorax (occurring more than seven days since radiographic resolution of a previous pneumothorax).

Interventions

Chemical pleurodesis

Outcome measures

Primary outcomes 1. Recurrence of pneumothorax 2. Mortality 3. Quality of life

Main results

No trials were included in this review

Authors' conclusions

Pneumothorax is a potentially life-threatening complication for people with cystic fibrosis and the management of spontaneous pneumothoraces remains a topic of considerable controversy. Medical and surgical intervention are the two main categories for the treatment of recurrent pneumothoraces in this population. However, it is disappointing that neither intervention has been assessed by randomised controlled trials. This systematic review identifies the need for a multicentre randomised controlled trial assessing both efficacy and possible adverse effects of the use of chemical pleurodesis versus surgical interventions for the treatment of persistent and recurrent pneumothoraces in people with cystic fibrosis. Due to a current lack of research in this area, while searches will still be undertaken every two years, the review will only be updated if any new evidence comes to light.

http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007481.pub3/abstract

See also

Amin R, Noone PG, Ratjen F. Chemical pleurodesis versus surgical intervention for persistent and recurrent pneumothoraces in cystic fibrosis. Cochrane Database of Systematic Reviews 2012, Issue 12 Art. No.: CD007481. doi: 10.1002/14651858.CD007481.pub3

Keywords

pleurodesis; Pneumothorax; Respiratory Tract Diseases; surgery; non pharmacological intervention - surg;