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Anti-IgE therapy for allergic bronchopulmonary aspergillosis in people with cystic fibrosis

Code: CD010288 **Year:** 2021 **Date:** 2013 - updated: 09 SEP 2021 **Author:** Jat Kana R

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

Randomized and quasi-randomized controlled trials

List of included studies (1)

Novartis 2008

Participants

People with CF (in accordance with the criteria laid down by the Cystic Fibrosis Foundation Consensus Report - Farrell 2008) and ABPA (diagnosed using the Rosenberg-Patterson criteria (Rosenberg 1977), Nelsonâ€™s criteria (Nelson 1979), Greenbergerâ€™s criteria (Greenberger 2002) or the Cystic Fibrosis Foundation Consensus Criteria (Stevens 2003)). No limit to age or disease severity for participants included in the review.

Interventions

Anti-IgE therapy compared to placebo or other therapies for ABPA in CF patients.We considered all doses of anti-IgE therapy in the review

Outcome measures

Primary outcomes 1. N of patients responding to anti-IgE therapy (a decrease in oral corticosteroid dose by 50% or more in comparison to baseline) 2. N of patients requiring rescue therapy with corticosteroids 3. Adverse effects (mild - do not lead to discontinuation of treatment; moderate - lead to a change in treatment; severe - lead to hospitalisation or are life-threatening) Secondary outcomes: FEV1, PEFR, FVC, FEV1/FVC; Time until steroid use ceases; Number of ABPA exacerbations; Pulmonary exacerbations requiring treatment (oral or nebulised or intravenous (IV) or combination); Hospitalisation.

Main results

Only one study enrolling 14 participants was eligible for inclusion in the review. The doubleâ€•blind study compared a daily dose of 600 mg omalizumab or placebo along with twice daily itraconazole and oral corticosteroids, with a maximum daily dose of 400 mg. Treatment lasted six months but the study was terminated prematurely and complete data were not available. We contacted the study investigator and were told that the study was terminated due to the inability to recruit participants into the study despite all reasonable attempts. One or more serious side effects were encountered in six out of nine (66.67%) and one out of five (20%) participants in omalizumab group and placebo group respectively

Authors' conclusions

There is lack of evidence for the efficacy and safety of antiâ€•IgE (omalizumab) therapy in people with cystic fibrosis and allergic bronchopulmonary aspergillosis. There is a need for large prospective randomized controlled studies of antiâ€•IgE therapy in people with cystic fibrosis and allergic bronchopulmonary aspergillosis with both clinical and laboratory outcome measures such as steroid requirement, allergic bronchopulmonary aspergillosis exacerbations and lung function.

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See also

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Keywords

Adult; Aged; Allergic Bronchopulmonary Aspergillosis -ABPA-; Aspergillus; Child; Fungi; Immunoregulatory; Itraconazole; Omalizumab; pharmacological_intervention; Immunoglobulins; Infection;