

Cochrane Database of Systematic Reviews - - Cochrane Review

Disease modifying anti-rheumatic drugs in people with cystic fibrosis-related arthritis

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

Randomised controlled trials which compared the efficacy and safety of disease-modifying anti-rheumatic drugs (e.g. methotrexate, gold, sulfasalazine, penicillamine, leflunomide, hydroxychloroquine and newer agents such as biologic disease modifying agents and monoclonal antibodies) with each other, with no treatment or with placebo for cystic fibrosis-related arthropathy or hypertrophic osteoarthropathy.

Participants

People of all ages with CF (diagnosed clinically and by sweat or genetic testing and including all degrees of disease severity) who have symptoms consistent with CF-related arthritis (for example joint pain, swelling, tenderness and limitation of movement) with clinical or radiological confirmation of the diagnosis. Studies of people with arthritis consisting of other conditions such as coexistent rheumatoid arthritis, sarcoidosis, psoriatic arthritis and drug reactions will be excluded.

Interventions

disease-modifying anti-rheumatic drugs (e.g. methotrexate, gold, sulfasalazine, penicillamine, leflunomide, hydroxychloroquine and newer agents such as biologic disease modifying agents and monoclonal antibodies)

Outcome measures

Primary outcomes 1. Joint involvement (number of swollen joints, number of joints with limited range of movement, number of painful joints - pain assessed, for example, using visual analogue scales, episodes of acute inflammatory joint involvement over a sixmonth period) 2. Joint damage (localised destructive joint changes and deformity, assessed through radiology) 3. Physical function (to be assessed using instruments including disease-specific instruments - for example, Health Assessment Questionnaire (HAQ), Child Health Assessment Questionnaire (CHAQ), Child Health Questionnaire (CHQ) and Juvenile Arthritis Functional Status Index (JASI)), generic instruments and visual analogue scales (VAS)

Main results

No studies were included in this review.

Authors' conclusions

Although it is generally recognised that cystic fibrosis-related arthritis can be episodic and resolve spontaneously, treatment with analgesics and anti-inflammatory agents may be needed. But when episodic symptoms progress to persistent disease, disease-modifying anti-rheumatic drugs may be needed to limit the course of the disease. It is disappointing that no randomised controlled trials to rigorously evaluate these drugs could be found. This systematic review has identified the need for a well-designed adequately powered randomised controlled trial to assess the efficacy and safety of disease-modifying anti-rheumatic drugs for the management of cystic fibrosis-related arthropathy and hypertrophic osteoarthropathy in adults and children with cystic fibrosis. However, given the infrequency of cystic fibrosis-related arthritis and the range of symptoms and severity, randomised controlled trials may not be feasible and well-designed non-randomised observational studies may be more appropriate. Studies should also better define the two conditions.

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007336.pub3/abstract>

See also

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Keywords

Arthritis-arthropathy; pharmacological_intervention; methotrexate; gold; sulfasalazine; penicillamine; leflunomide; hydroxychloroquine; anti-rheumatic agents;