

Anakinra effective in rheumatoid arthritis

Clinical question	How effective is anakinra in adults with rheumatoid arthritis (RA)?
Bottom line	Compared to placebo, adults with arthritis taking 50-150mg anakinra daily for 6 months had a 15% improvement in symptoms such as pain, function and stiffness (NNT* 8). Other efficacy data, including American College of Rheumatology (ACR) 50, ACR 70, Health Assessment Questionnaire (HAQ) score, Visual Analogue Scales, Larsen radiographic scores, and change in erythrocyte sedimentation rate, also demonstrated significant improvement with anakinra. When compared to other Cochrane Reviews of biologic therapies for RA, specifically etanercept, infliximab and adalimumab, the absolute benefit of treatment versus placebo for the proportion achieving ACR 20, ACR 50 and ACR 70 was noticeably lower. *NNT = number needed to treat to benefit 1 individual.
Caveat	There was significant variability among the included studies with the specific outcomes measured, limiting the power of the systematic review. The method of randomisation was not reported in any study, and a number did not report full blinding. Only 1 study described a true intention-to-treat analysis.
Context	RA is the most common inflammatory arthritis in adults, affecting 0.5 to 1% of the population worldwide. Anakinra is an interleukin-1 receptor antagonist that is currently Federal Drug Authority-approved for moderate to severe RA that has been unresponsive to initial disease-modifying anti-rheumatic drug (DMARD) therapy. The primary efficacy outcome measure in the trials was the ACR 20 - a 20% improvement in tender and swollen joint counts, and the same level of improvement in 3 of the following 5 variables: patient/physician global assessments, pain scores, HAQ, score and laboratory acute phase reactants.
Cochrane Systematic Review	Mertens M and Singh JA. Anakinra for rheumatoid arthritis. Cochrane Reviews 2009, Issue 1. Article No. CD005121. DOI: 10.1002/14651858.CD005121.pub.3. This review contains 5 trials involving 2876 participants.
PEARLS No. 150, April 2009, written by Brian R McAvoy (First published in New Zealand Doctor, 6 May 2009)	

[References]

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