

**Annual European Congress of Rheumatology
(EULAR 2019)**

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**LOW-DOSE PREDNISOLONE SIGNIFICANTLY IMPROVES PAIN SYMPTOMS AND
FUNCTION IN HAND OSTEOARTHRITIS**

HOPE study demonstrates that local inflammation is a suitable target for treatment in patients with debilitating disease

Madrid, Spain, 12 June 2019: The results of the low-dose prednisolone in patients with hand osteoarthritis (HOPE) study presented today at the Annual European Congress of Rheumatology (EULAR 2019) show that low-dose prednisolone significantly improves pain and function in patients with painful hand osteoarthritis.¹

Hand osteoarthritis is a common joint disease. It is characterised by stiff and painful joints. Given the burden of disease, there is a need for effective therapeutic options.

Treatments are currently limited to topical and oral non-steroidal anti-inflammatory drugs (NSAIDs) to relieve pain.² However, studies have shown that synovial inflammation is often present in hand osteoarthritis and it is this inflammation that is a main determinant of pain and radiographic disease progression, identifying synovitis as a possible target of treatment.^{3,4} Prednisolone is a glucocorticoid used to reduce inflammation and has been used in rheumatic diseases such as rheumatoid arthritis, polymyalgia, lupus and vasculitis for a long time. However, glucocorticoid use is currently not recommended in patients with hand osteoarthritis due to a previous lack of evidence.⁵

“Hand osteoarthritis is a common musculoskeletal disease, with prevalence rising steeply with increasing age,” said Professor John D. Isaacs, Chairperson of the Abstract Selection Committee, EULAR. “Oral glucocorticoid therapy was not included in the recent treatment guidelines update due to limited conflicting data, therefore we welcome these positive results that provide further, controlled evidence in this area.”

Results presented today demonstrate that prednisolone (10mg) provides a significant improvement in pain with an average -16.5 point difference in VAS* finger pain (95% confidence interval (CI); -26.1 to -6.9) and a -3.5 point difference in AUSCAN pain* (95% CI; -4.9 to -2.1, $p < 0.001$). In addition, 72% vs. 33% of patients treated with prednisolone and placebo respectively were classified as responders using the OMERACT-OARSI responder criteria. Prednisolone was shown to significantly improve function with an adjusted mean between-group difference of -3.7 points in AUSCAN function* ($p = 0.01$) and -2.1 points in FIHOA* ($p = 0.03$). Significant differences were also shown in SF-36* physical component scale

* VAS, Visual Analogue Scale (0-100); AUSCAN pain, Australian/Canadian Hand Osteoarthritis Index (0-20); AUSCAN function, Australian/Canadian Hand Osteoarthritis Index (0-36); FIHOA, Functional Index for Hand Osteoarthritis (0-30); SF-36, Short Form 36

and the VAS* patient global assessment. A significant reduction in synovitis was also demonstrated using ultrasound.¹

“Our study provides evidence that local inflammation is a suitable target for drug treatment in hand osteoarthritis,” said Féline Kroon, Leiden University Medical Center, Leiden, The Netherlands. “Significant improvements in pain and function were seen in the trial meaning prednisolone could be considered by physicians treating people suffering with hand osteoarthritis.”

The study was a randomised, double-blind, placebo-controlled trial of 92 patients with painful hand osteoarthritis (fulfilling American College of Rheumatology criteria) and signs of synovial inflammation. Eligible patients were randomised to receive prednisolone 10mg daily for 6 weeks or placebo, followed by a two-week tapering scheme and six weeks without study medication. The mean age of patients was 63.9 years and 79% were women with baseline characteristics well-balanced between the groups. After tapering, all between group differences disappeared, and adverse events were mostly mild and comparable between groups.¹

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-ENDS-

NOTES TO EDITORS

For further information on this study, or to request an interview with the study lead, please do not hesitate to contact the EULAR Press Office:

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About Rheumatic and Musculoskeletal Diseases

Rheumatic and musculoskeletal diseases (RMDs) are a diverse group of diseases that commonly affect the joints, but can also affect the muscles, other tissues and internal organs. There are more than 200 different RMDs, affecting both children and adults. They are usually caused by problems of the immune system, inflammation, infections or gradual deterioration of joints, muscle and bones. Many of these diseases are long term and worsen over time. They are typically painful and limit function. In severe cases, RMDs can result in significant disability, having a major impact on both quality of life and life expectancy.⁶

About EULAR

The European League against Rheumatism (EULAR) is the European umbrella organisation representing scientific societies, health professional associations and organisations for people with RMDs. EULAR aims to reduce the burden of RMDs on individuals and society and to improve the treatment, prevention and rehabilitation of RMDs. To this end, EULAR fosters

excellence in education and research in the field of rheumatology. It promotes the translation of research advances into daily care and fights for the recognition of the needs of people with RMDs by the EU institutions through advocacy action.

To find out more about the activities of EULAR, visit: www.eular.org

References

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