

Pain Management by Pharmacotherapy in Inflammatory Arthritis. Systematic Literature Reviews of the 3e Initiative 2010

The 3e Initiative (Evidence, Expertise, Exchange) is a multinational task force devoted to producing evidence-based recommendations for daily clinical practice in Rheumatology. It is a combination of systematically generated evidence and expert opinions of an international panel of rheumatologists.

Since 2006, the 3e initiative has addressed successively the management of Ankylosing Spondylitis¹, the use of Methotrexate in Rheumatoid Arthritis², and the management of patients with Undifferentiated Peripheral Inflammatory Arthritis (UPIA)³, resulting in multinational recommendations on these topics.

The 2010 3e collaboration's objective was to elaborate recommendations on how to manage musculoskeletal pain by pharmacotherapy in inflammatory arthritis, which remains a daily clinical issue despite the significant advances in treatments in the past decade. Inflammatory arthritis for this topic includes rheumatoid arthritis, ankylosing spondylitis, other forms of spondyloarthritis, and psoriatic arthritis.

Participants for the 2010 3e initiative included 453 rheumatologists from 17 countries from both academic institutions and private practice.

By the way of a Delphi process, rheumatologists selected the 11 following clinically relevant questions:

- How do we measure/score pain and how do we monitor effectiveness of pain treatment in inflammatory arthritis?⁴
- What is the effectiveness, safety, and role of paracetamol (acetaminophen) in pain management in patients with inflammatory arthritis (i.e., interval, formulation, and route)?⁵
- What is the effectiveness, safety, and role of corticosteroids for pain relief in persistent pain of inflammatory arthritis (i.e., interval, formulation, and route)?⁶
- What is the effectiveness, safety, and role of antidepressants⁷, neuromodulators⁸, and muscle relaxants⁹ in pain management in patients with inflammatory arthritis (i.e., interval, formulation, and route)?
- What is the effectiveness, safety, and role of opioids or opioid-like therapy in inflammatory arthritis, and how should it be administered (i.e., interval, formulation, and route)?¹⁰
- Is there any evidence that drugs with different modes of action in various combinations have added value?¹¹
- Is there a difference in efficacy and safety between on-demand and continuous use of nonsteroidal antiinflammatory drugs (NSAID) in inflammatory arthritis?¹²
- What pain therapy can be used safely in the preconception,

pregnancy, and lactation periods in inflammatory arthritis?¹³

- Is it safe to use NSAID and/or paracetamol with methotrexate in the management of patients with inflammatory arthritis?¹⁴
- How do gastrointestinal (GI) and liver comorbidities influence the choice of pain treatment in inflammatory arthritis?¹⁵
- How do cardiovascular (CV) and kidney comorbidities influence the choice of pain treatment in inflammatory arthritis?¹⁶

To answer these questions, 13 systematic literature reviews (SLR) were undertaken by 10 multinational fellows mentored by 6 SLR experts. Of note, 8 of these SLR^{7,8,9,10,11,14,15,16} are co-published with the Cochrane Collaboration. These SLR served as a scientific basis for the formulation of 11 recommendations by rheumatologists in 17 countries¹⁷. The purpose of this supplement is to have all the evidence collected in the SLR, which served as the basis for the multinational recommendations, gathered in the same volume.

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