

Topical NSAIDs effective for pain in knee osteoarthritis

Clinical Question	How effective are topical non-steroidal anti-inflammatory drugs (NSAIDs) for chronic musculoskeletal pain in adults?
Bottom Line	Diclofenac and ketoprofen were the only two NSAIDs with good quality and longer duration studies, mostly in people aged over 40 years with painful knee arthritis. There is no evidence for other chronic painful conditions. For diclofenac and ketoprofen, about six people out of 10 with osteoarthritis had much reduced pain after six to 12 weeks, compared with five out of 10 with topical placebo (moderate quality evidence). Skin reactions (mostly mild) were more common with topical diclofenac (20%) than topical placebo (5%); there was no difference between topical ketoprofen and topical placebo (moderate quality evidence). Other adverse events, like stomach upsets, were poorly reported in these studies, but were no different between topical diclofenac or ketoprofen and topical placebo (very low quality evidence). Serious adverse events were uncommon. Few trials compared a topical NSAID to an oral NSAID, but overall they showed similar efficacy (low quality evidence).
Caveat	There is emerging evidence that at least some of the substantial placebo effects seen in longer duration studies derive from effects imparted by the topical carrier itself, and that NSAIDs add to that.
Context	Use of topical NSAIDs to treat chronic musculoskeletal conditions has become widely accepted because they can provide pain relief without associated systemic adverse events.
Cochrane Systematic Review	Derry S et al. Topical NSAIDs for chronic musculoskeletal pain in adults. Cochrane Reviews, 2016, Issue 4. Art. No.: CD007400.DOI: 10.1002/14651858. CD007400.pub3. This review contains 39 studies involving 10,361 participants. It is an update of a Cochrane Review published in September 2012, and includes five new studies and 38% more participants than the 2012 review.
