Limited benefit for tramadol in osteoarthritis

**Clinical Question**
How effective is tramadol or tramadol combined with paracetamol or non-steroidal anti-inflammatory drugs (NSAIDs) in people with osteoarthritis (OA)?

**Bottom Line**
Based on moderate quality evidence, tramadol alone or in combination with paracetamol probably had no important benefit on mean pain intensity (4% absolute improvement) or physical function over placebo in people with osteoarthritis. However, there were slightly more people (5%) in the tramadol group who achieved a clinically important improvement (at least 20%) in pain. Moderate quality evidence showed that adverse events probably cause substantially more participants to stop taking tramadol. The increase in serious adverse events with tramadol was less certain, due to the small number of events. Participants were predominantly women, with an average age of 63 years, and with moderate to severe pain. The length of the studies ranged from one week to three months.

**Caveat**
There was a high risk of selection bias as only four trials reported both adequate sequence generation and allocation concealment. The doses of tramadol used in the studies were variable, ranging from 37.5 mg to 400 mg daily. Most of the trials were funded by the pharmaceutical industry.

**Context**
Tramadol is often prescribed to treat pain and associated physical disability in OA. Due to the pharmacologic mechanism of tramadol, it may lead to fewer associated adverse effects (i.e. gastrointestinal bleeding or renal problems) compared to NSAIDs.

**Cochrane Systematic Review**
Toupin AK et al. Tramadol for osteoarthritis. Cochrane Reviews, 2019, Issue 5. Art. No.: CD005522. DOI:10.1002/14651858.CD005522.pub3. This review contains 22 studies involving 6,496 participants.

Pearls No. 647, March 2020, written by Brian R McAvoy. C40

Systematic review link: