Statin Use and Musculoskeletal Pain Among Adults With and Without Arthritis

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KEY POINTS FROM THIS STUDY

1) Statins are one of the most widely prescribed medications in the United States and globally.

2) In 2003-2004, it was estimated that 24 million US individuals took statins.

3) Musculoskeletal symptoms are common adverse effects of statins drugs, including muscle aches, pain, weakness, and cramps.

4) This study assessed 8228 subjects over 40 years of age, and 5170 had not been diagnosed with arthritis.

5) The cofounders adjusted for in this study included age, sex, race/ethnicity (non-Hispanic white, non-Hispanic black, Mexican-American, others), smoking status (never, former, current), self-reported health, coronary heart disease, diabetes, cancer, systolic blood pressure, BMI, total cholesterol, and ankle brachial index.

6) Among 5,170 participants without arthritis, the prevalence of musculoskeletal pain was significantly higher for statin users reporting pain, as follows:

   - Pain in any region was found in 23% among statin users compared with 18% among those not using statins.

   - Pain in the lower extremities was found in 12% among statin users compared with 8% among those not using statins.

7) After controlling for confounders, among those without arthritis, statin use was associated with a significantly higher prevalence of musculoskeletal pain, as follows:

   - Pain in any region was increased by 33%.

   - Pain in the lower back was increased by 47%.

   - Pain in the lower extremities was increased by 59%.
8) “Compared with those without arthritis, those with arthritis showed approximately 2-fold the prevalence of reported musculoskeletal pain in all regions.”

9) “Statin use among those without arthritis remained significantly associated with a higher prevalence of musculoskeletal pain, particularly in the lower extremities and lower back, with a number needed to harm of 17 for musculoskeletal pain in any region.”

10) “Among those with arthritis, our data did not show higher prevalence of musculoskeletal pain among statin users. “Arthritis commonly typifies a more prominent pain and could mask statin-associated pain, thus mitigating the association between statin-related pain and arthritis.”

11) In this population-based study, statin use was associated with a higher prevalence of musculoskeletal pain, particularly in the lower extremities, among individuals without arthritis.

CLINICAL SIGNIFICANCE FROM AUTHORS

- Individuals without arthritis using statins were 33% more likely to report musculoskeletal pain overall.

- 1 out of every 17 people taking statin drugs developed musculoskeletal pain syndromes (number needed to harm = 17).

COMMENTS FROM DAN MURPHY

On the positive side:
This study could be good for our business. Millions of people take statin drugs, and statin drugs increase the incidence of all pain, but particularly low back and leg pain.

On the negative side:
If statin drugs are the primary cause of our patient’s pain syndromes, these drugs may reduce the effectiveness of traditional chiropractic spinal adjusting in the management of such pain syndromes. Consequently, it may be necessary to include adjunct strategies such as stopping statin drugs, alternatives to statin drugs, dietary changes (especially the elimination of refined carbohydrates), and supplementation with CoQ10.


Buettner et al Statin Use and Musculoskeletal Pain 181
