

Lay Abstract for:

Teirlinck, C. H., Dorleijn, D. M., Bos, P. K., Rijkels-Otters, J. B. M., Bierma-Zeinstra, S. M. A., & Luijsterburg, P. A. J. (2019). Prognostic factors for progression of osteoarthritis of the hip: a systematic review. *Arthritis research & therapy*, 21(1), 192.

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Prepared by: Jill VanDamme, PhD candidate

Lay Title: What could make your hip arthritis worse? Summarizing what the research says.

Who are we? We are researchers from the Netherlands interested in understanding arthritis better.

Why we did this study: Right now, there is no way to heal hip osteoarthritis (OA). Over time you may need a surgery called a *total hip replacement* to improve your symptoms. We did this study to answer two questions: (1) what might make your hip OA worse? and (2) what might mean you need a total hip replacement sooner?

How we did this study: We searched six online databases of medical journals to find studies on hip OA. We picked out 57 studies that would help us understand what could make your hip OA worse, and what could mean you need a total hip replacement sooner. We read each of the studies and summarized what we found.

What we learned:

1. Things that could make your hip OA worse: We learned that living with other health conditions could make your hip OA worse. For example, diabetes, heart disease and obesity* may make your hip OA worse. The more health problems you have, the more likely your hip OA will get worse. But we also learned that some things do not mean your hip OA will be worse. Your weight*, gender, quality of life, use of pain medication, how much family/friend support you have, and how your hip joint moves does not mean your hip OA will be worse.

2. Things that could mean you need a total hip replacement: We learned about three things your doctor can see on an X-Ray that may mean you need a total hip replacement sooner. They are called 1) a Kellgren and Lawrence grade, 2) superior head migration, and 3) subchondral sclerosis. We'll explain those terms to you now.

A *Kellgren and Lawrence grade* shows how serious your hip OA is. Doctors use what they see on the X-Ray to give your OA a score from 0 (no OA) to 4 (severe OA). The higher the score, the more likely it is you may need a total hip replacement. *Superior head migration* is how your leg bone fits into the hip joint. If your leg bone sits higher up in your hip joint this means your leg and hip bones rub together and cause more damage. *Subchondral sclerosis* means your body is building more bone at the top of leg

bone under the cartilage. This is your body trying to absorb forces and protect the hip joint. If your doctor sees superior head migration or subchondral sclerosis on your X-Ray, you might need a hip replacement sooner than someone who doesn't have these.

Why is this important? If your doctors know your hip OA may get worse sooner, they can suggest more specific therapies to manage your hip OA better. Your doctor can also refer you to a specialist earlier if they see you may need a total hip replacement sooner.

*To learn about the difference between weight and obesity click on the underlined text to watch some helpful YouTube videos: (1) [Condition of Overweight vs. Obesity](#), (2) [Being Overweight vs. Being Obese](#).

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