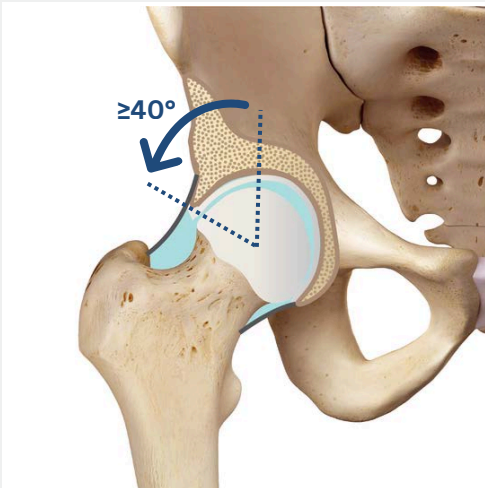


HIP FACTS FROM THE LITERATURE #93

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Pincer Morphology is Not Associated with Hip Osteoarthritis Unless Hip Pain is Present



Pincer Morphology

- A deep or retroverted socket
- Global or anterior acetabular overcoverage of the femoral head
- Lateral &/or Anterior Centre Edge Angle $\geq 40^\circ$

No association between pincer morphology and radiographic hip OA at 2 - 10 years follow-up.
Anteriorly located pincer morphology
PLUS hip pain = significant association with development of hip OA.

Pincer morphology alone is not associated with developing hip OA. Other factors that contribute to hip pain appear to be involved. Target modifiable factors.

This large prospective cohort study, that followed middle aged adults over time, showed that pincer morphology by itself (overcoverage of the femoral head by the acetabulum) was not associated with the development of hip osteoarthritis. However, if the individual had hip pain and anterior acetabular overcoverage of the femoral head (pincer morphology), they were more likely to develop hip OA.

What this tells us is that pincer morphology alone does not predict the development of hip osteoarthritis. There are other factors that contribute to the development of pain, and many of these factors may be modifiable e.g., training habits, exposure to end-range-motion, muscle strength and coordination, movement patterns. So there is much we can do to potentially reduce the risk of developing OA, and/or settle pain in those with pincer morphology.

Riedstra NS, Boel F, van Buuren M, et al. Pincer morphology is not associated with hip osteoarthritis unless hip pain is present: Follow-up data from a prospective cohort study. *Arthritis Care Res (Hoboken)*. 2024 May;76(5):644-651.