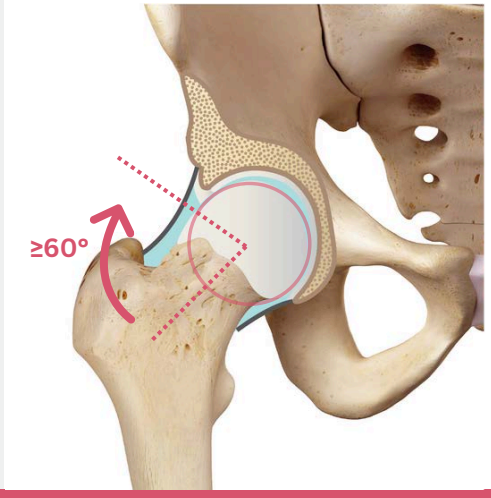
Dr. Alison Grimaldi

PHYSIOTHERAPIST, RESEARCHER & EDUCATOR

HIP FACTS FROM THE LITERATURE #94

dralisongrimaldi.com

CAM TYPE FAIS IS STRONGLY ASSOCIATED WITH INCREASED ODDS OF HIP OA WITHIN 10 YEARS



Cam Morphology

- **Aspherical femoral head, with additional bone at the head-neck junction**
- **Alpha Angle ≥60°** (where bone is first evident outside a circle drawn around the femoral head)

Cam type Femoroacetabular Impingement Syndrome (FAIS)

- **Hip pain**
- **Limited hip internal rotation ≤25°**
- **Cam evident on imaging ≥60°**

= nearly 7 x increased odds of developing hip osteoarthritis within 10 years

The presence of cam type FAIS is a significant risk factor for developing hip OA. Educate patients on the importance of hip care & target modifiable risk factors.

An earlier paper from this cohort established that cam-type mophology of the femoral head is a significant risk factor for the development of hip osteoarthritis, with risk increasing with the size of the cam (the bony bump at the head-neck junction). This new paper has analysed both imaging features and clinical features to determine the risk of cam type FAIS - remember Femoroacetabular Syndrome refers to the combination of imaging features (aspherical femoral head for cam type), symptoms (anterior hip pain) and clinical signs (limited internal rotation/flexion range of motion, pain reproduced in positions of impingement).

The authors reported that Cam type FAIS is strongly associated with increased odds of hip OA within 10 years, in middle aged adults. Hip pain + limited hip internal rotation + cam morphology = nearly 7 x greater risk of developing hip OA.

From previous work, we know that about 75% of people with an aspherical femoral head do NOT go on to develop hip pain or OA, so a cam on imaging does not mean you are destined to develop hip OA. However, in the combined presence of pain and clinical signs (painful, restricted ROM into flexion, and IR in hip flexion), the risk is much higher. So if you have a patient with this combination of features, educate them on the potential increase in risk and give them positive strategies to reduce risk by targeting modifiable risk factors - what they do with their hip, support systems around their hip and general lifestyle factors.

Agricola R, et al. Femoroacetabular impingement syndrome in middle-aged individuals is strongly associated with the development of hip osteoarthritis within 10-year follow-up: a prospective cohort study (CHECK). Br J Sports Med. 2024 Sep 9;58(18):1061-1067.