REFERENCES

BONE SHAPE DOES NOT CAUSE THE PROBLEMS ASSOCIATED WITH FAI

1. Gosvig, K..K, Jocobsen, S., Sonne-Holme, S., &Gebuhr, P. (2008). The prevalence of cam-type deformity of the hip joint: a survey of 4151 subjects of the Copenhagen Osteoarthritis study. *Acta Radiol, 49*, 436-441.

   Key Points:

   "The overall prevalence of cam deformity was approximately 17% in men and 4% in women. The distribution of cam deformity was unaltered in subjects with normal joint-space width or other features of hip-joint degeneration. We found no significant association with self-reported hip pain…it is a far from uncommon deformity in subjects with no apparent evidence of hip-joint osteoarthritis."

   "We found no significant correlation to hip pain or groin pain, nor did we find any significant relationship between hip dysplasia and cam deformity, or between radiologic evidence of hip-joint OA and cam deformity."

   http://www.ncbi.nlm.nih.gov/pubmed/18415788

2. Weir, A., de Vos, R. J., Moen, M., Holmich, P., Tol, J.L. (2011). Prevalence of Radiological signs of femoroacetabular impingement in patients presenting with long-standing adductor-related groin pain. *British Journal of Sports Medicine, 45(1)*,6-9.

   Key Points:

   There was no correlation between hip ROM and the number of radiological signs.

   "Radiological findings of hip impingement are often present without the anterior hip impingement test being painful. The anterior hip impingement test may not be specific for femoroacetabular impingement."

   http://www.ncbi.nlm.nih.gov/pubmed/19622528

3. Chakraverty, J. K., Sullivan, C., Gan, C., Narayanaswamy, S., & Kamath, S. (2013). Cam and pincer femoroacetabular impingement: CT findings of features resembling femoroacetabular impingement in a young population without symptoms. *American Journal of Roentgenology, 200(2)*, 389-395.

Key Points:

"At least one abnormal parameter was present in 66% of joints, and two or more abnormal parameters were present in 29% of joints. In seven patients the findings were bilateral. Parameters of mixed morphologic characteristics (cam and pincer) were found in 22% of joints. In side-by-side comparison, high alpha angles were seen in 36 joints measured in the radial plane compared with only three joints measured in the axial oblique plane…The CT finding of FAI-like features was made with high frequency in a young symptom-free population."

http://www.ncbi.nlm.nih.gov/pubmed/23345362

4. Jung, K. A., Restrepo, C., Hellman, M., AbdelSalam, H., Morrison, W., & Parvizi, J. (2001). The prevalence of cam-type femoroacetabular deformity in asymptomatic adults. *Journal of Bone and Joint Surgery, 99(10)*, 1303-1307.

Key Points:

215 men, 13.95% were classified as pathological. 540 women. 5.56% were pathological.

"It appears that the cam-type femoroacetabular deformity is not rare among the asymptomatic population. These anatomical abnormalities… appear to be twice as frequent in men as in women. Although an association between osteoarthritis and femoroacetabular impingement is believed to exist, a long-term epidemiological study is needed to determine the natural history of these anatomical abnormalities."

http://www.ncbi.nlm.nih.gov/pubmed/21969426

5. Hack, K., Primio, G., D., Rakhra, K., Beaule, P. E. (2010). Prevalence of cam-type femoroacetabular impingement morphology in asymptomatic volunteers. *The Journal of Bone and Joint Surgery, Inc., 14,* 2436-2444.

Key Points:

Of 111 asymptomatic women and 89 asymptomatic men, 14% had cam-type impingement in MRIs. 25% of the men had it. 5% of the women had it."

http://www.ncbi.nlm.nih.gov/pubmed/20962194