

**#1389**

## **Age-Related Prevalence Of Femoroacetabular Impingement Morphology**

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**Introduction:** The prevalence of radiographic femoroacetabular impingement (FAI) morphology is poorly defined in asymptomatic adolescents and young adults.

**Objectives:** The purpose of this study was to document the prevalence of radiographic findings of pincer type pathology in asymptomatic population and reveal relationship between age and these findings..

**Methods:** A total of 2103 hips in 1052 patients who underwent abdominal or pelvic CT for other medical diseases from January 2012 to December 2012 and whose age were between 10 to 59 years old were identified retrospectively. AP scout images taken during CT scanning were used to analyze for acetabular cross over sign, Prominent ischial spine sine(PRIS), coxa profunda, and posterior wall sign. These were subdivided into 532 hips younger than 30 years (group 1) and 1571 hips aged 30 years or older than 30 years (group 2). Post operated hip and severe osteoarthritis were excluded.

**Results:** More than one pincer type findings were detected in 79% of Group1 hip and 58% of Group2 hip. Cross over sign and PRIS was seen significantly more often in Group1 than Group2, respectively as follows: Cross over sign, 73.1 and 29.3% ( $P<0.001$ ) ; and PRIS, 23.9% and 7.4%( $P<0.001$ ). Posterior wall sign and Coxa profunda was seen significantly more frequently in Group2 than Group1, respectively as follows: Posterior wall sign, 4.7% and 11.0%( $P<0.001$ ); and Coxa profunda, 3.4% and 21.2%( $P<0.001$ ).

**Conclusions:** This study reveals that radiographic Pincer findings are common in asymptomatic adolescents and young adults. The prevalence of each findings are depend on patients' age. We should not make a diagnosis relying on the radiographic parameters without concerning about patients age.