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Overdiagnosing of femoroacetabular impingement: correlation between clinical presentation and computed tomography in symptomatic patients.

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Abstract in **English**, Portuguese

OBJECTIVE: To correlate the angles between the acetabulum and the proximal femur in symptomatic patients with femoroacetabular impingement (FAI), using computed tomography (CT).

METHODS: We retrospectively evaluated 103 hips from 103 patients, using multislice CT to measure the acetabular age, acetabular version (in its supraequatorial portion and in its middle third), femoral neck version, cervical-diaphyseal and alpha angles and the acetabular depth. For the statistical analysis, we used the Pearson correlation coefficient.

RESULTS: There were inverse correlations between the following angles: (1) acetabular coverage versus alpha angle (p = 0.019); (2) acetabular version (supraequatorial) versus alpha angle (p = 0.049). For patients with femoral anteversion lower than 15 degrees: (1) acetabular version (supraequatorial) versus alpha angle (p = 0.026); (2) acetabular version (middle third) versus alpha angle (p = 0.02). For patients with acetabular version (supraequatorial) lower than 10 degrees: (1) acetabular version (supraequatorial) versus alpha angle (p = 0.004); (2) acetabular version (middle third) versus alpha angle (p = 0.009).

CONCLUSION: There was a statistically significant inverse correlation between the acetabular version and alpha angles (the smaller the acetabular anteversion angle was, the larger the alpha angle was) in symptomatic patients, thus supporting the hypothesis that FAI occurs when cam and pincer findings due to acetabular retroversion are seen simultaneously, and that the latter alone does not cause FAI, which leads to overdiagnosis in these cases.

KEYWORDS: Femoroacetabular impingement; Hip; X-ray computed tomography

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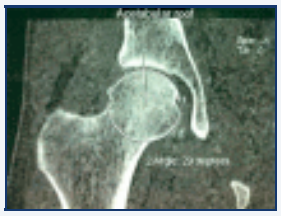
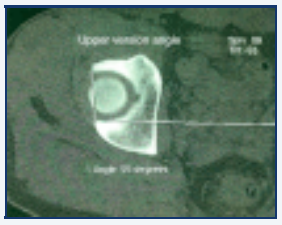
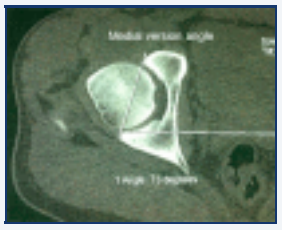
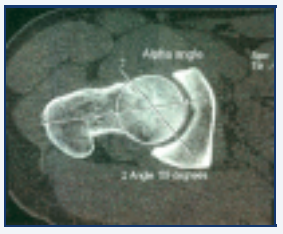

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