

A study of Sexual Dimorphism of Maximum Medial condyle Length of Femur

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Abstract:

Maximum length of medial condyle of femur is the distance between the most anterior and most posterior point on the articular surface of the medial condyle. Present study aims to obtain values of medial condyle length and to evaluate its possible usefulness in determining correct sexual identification. Study sample consisted of 242 dry, human, adult femora [176 male (87 right, 89 left) and 66 female (32 right, 34 left)] from skeletal collections of Anatomy departments of M. P. Shah Medical College, Jamnagar, Gujarat & P. D. U. Govt. Medical College, Rajkot, Gujarat. Medial condyle length was measured with the help of caliper. Mean Values obtained were, 57.8 mm and 53.6 mm for right male and female, and 58.1mm and 55.4 mm for left male and female respectively. Higher value in male was statistically highly significant ($P < 0.001$) on both sides. Demarking point (D.P.) analysis of the data showed that right femora with medial condyle length more than 62.24 mm were definitely male and less than 46.37 mm were definitely female; while left femora with medial condyle length more than 67.69 mm were definitely male and less than 46.34 mm were definitely female. Medial condyle length identified 8.04% of right male femora, 6.25% of right female femora, 1.12% of left male femora and 0.00% of left female femora.

Key-words: Medial condyle length, Sexual dimorphism, Femur