Assessment of Sex from Cross Sectional Area of Femoral Head

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ABSTRACT The present study evaluates the possibility of sex assessment from the cross sectional area of various segments of the femur head. An instrument was devised which could measure the cross sectional area without cutting sections of the femur head. The result obtained with the instrument devised was physically checked with a pilot study by making sections at designated spots in twenty femur head specimens (ten of each sex). Both the methods were found to produce similar results. The study was further extended on 60 male and 35 female Indian femora. The data exposed to discriminant function analysis using SPSS package produced an accuracy of 97.89% with single variable. The discriminant functions so obtained when applied on a test sample of 51 males and 30 females produced similar result. The present study is based on the principle postulated in assigning the bone in anatomical position and identifying anatomical landmarks and not by ‘Eye Judgement’.

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