A Study of the Collo-Diaphyseal Angle in an Adult Population in Southern Nigeria

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The collodiaphyseal angle which is also called the neck-shaft angle is the angle formed between the axis of the shaft of the femur and the neck. This study was aimed at finding out the variations in the different adult age groups in the Southern Nigeria population. A total of 232 anterior posterior radiographs of the pelvis showing both hip joints of normal adult males and females age ranging from 20-79 years were utilized for this study. Results showed a decline in the values of the collo-diaphyseal angles as age progresses, the least was recorded for the old age group of 70-79 years. The males in all the age groups had larger collo-diaphyseal angles though only significant at the age ranges of 20-29 years and 40-49 years (p<0.05). The least recorded angles was 127\textdegree for the elderly females. This study has shown a tendency towards coxa vara in the elderly population and it is imperative to emphasize the possibility of applying this finding in orthopaedic practice in relation to the risk of fracture of the neck of the femur.

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