

ABSTRACT

OBJECTIVES: The objectives of this study are to determine the various parameters of proximal end of femur among Indian population and to compare them with the data available in literature. **MATERIALS AND METHODS:** This study was done on 100 adult dry human Femora (50 right side and 50 left side), collected from the Institute of Anatomy, Madurai Medical College, Madurai. **RESULTS:** In this study the Head Vertical Diameter was 41.8 mm on right and 41.97 mm on left. Head Transverse Diameter was 4.15 mm on right and 43.41 on left side. The Neck Vertical Diameter was 31.68 mm on right and 32.66 mm on left. The Neck Transverse Diameter was 24.24 mm on right and 25.83 mm on left. The Head Length of Femur Superiorly was 31.8 mm on right and 32.16 mm on left. The Head Length of Femur Inferiorly was 23.13 mm on right and 22.47 mm on left. The Neck Length of Femur Superiorly was 22.91 mm on the right and 23.66 mm on the left. The Neck Length of Femur Inferiorly was 29.11 mm on right and 30.21mm on the left. The Intertrochanteric Length was 56.97 mm on the right and 58.1 mm on the left. The Mean Neck Shaft Angle was 129.04 degrees on the right and 127.98 degrees on the left. **CONCLUSION:** The values of all the parameters are greater in the Western population than in the present study. This study will help the Orthopedicians and prosthetists to build suitable prosthesis for Indians.

KEY WORDS : Femur, Indian Population, Parameters, Prosthesis