Morphometrical Study of Human Adult Dry Hip Bones in Gujarat Region

Dr. Ajay M. Parmar^{1*}, Dr. Urmila N. Pateliya², Dr. Jatin B. Goda³, Dr. Hitesh Babel⁴

¹Associate Professor, Department of Anatomy, Government Medical college, Dungarpur, Rajasthan.

- ² Assistant Professor, Department of Anatomy, GMERS Medical Collage, Vadnagar, Gujarat.
- ³ Associate Professor, Department of Anatomy, Dr. N. D. Desai faculty of Medical sciences and research, Nadiad, Gujarat.

⁴ Professor & Head, Department of Anatomy, Government medical college, Dungarpur, Rajasthan.

Corresponding Author: Dr. Ajay Mansukhbhai Parmar

Email: drajay9118@gmail.com



Abstract

Background: To study morphometry of human adult dry hip bone in Gujarat region in order to obtain and compare different parameters of male and female hip bones. **Material and Method**: Study material consists of total 88 hip bones (52 male and 36 female). Non metric parameter i.e. weight of hip bones was measured by using digital weighing machine and metric parameter i.e. length and width were measured by osteometric board & metallic scale. Coxal index was calculated. **Results:** The mean weight of male hip bone was 135.91 gram and in female it was 92.21 gram. The mean length of male and female hip bone was 19.65 cm and 18.39 cm respectively. The mean width of male and female hip bone was 14.19 cm and 14.18 cm respectively. Coxal index of male and female hip bones were 72.53 and 77.26 respectively. **Conclusion:** The mean weight and length of male hip bones were higher than female hip bones. The mean width of male and female hip bones was near to similar. The coxal index was more in female than male hip bone. This study will help anatomist, anthropologist, and forensic expert for identification of individual from skeletal remains.

Key words: Hip bone, Morphometry, Coxal index