OP 5 PRELIMINARY ANTHROPOMETRIC STUDY OF ORBITS IN SRI LANKAN POPULATION

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Introduction

Orbital morphometric measurements vary considerably among nations worldwide. These measurements are of value in a variety of specialities such as in craniofacial reconstructive surgery, genetic counseling and forensic medicine. This study was carried out to assess the osteometric measurements of orbits of Sri Lankans since there were no published studies available.

Objective

To assess the variations in the anthropometric measurements of the bony orbits.

Methods

Twenty-seven (27) bony skulls were obtained from the Department of Anatomy of the University of Sri Jayawardenepura which were categorized into either sex according to external characteristics. Measurements were obtained using a manual vernier caliper by two individuals independently and each measurement was measured for three times and mean value was taken.

Results

Mean orbital Index (MOI) was varying from 0.84 ± 0.06cm with half of the sample[50%(27/54)] and 27.7%(15/54) were belong to the microsome and megasome categories respectively. Both categories had equal gender distribution and higher than the present literature. Microsome and megasome category was commonly right [59.3% (16/27)] and left [66.7% (10/15)] orbits respectively.Mean orbital width (3.83 ± 0.28cm) was greater than the mean orbital height (3.21 ± 0.16cm)

Bi-orbital distance and Intra-orbital distance had a mean value of 9.51 ± 0.47cm and 2.09 ± 0.36cm respectively with equal gender distribution.Inter Fronto-malare-temporal mean distance was $10.91+/-0.41$cm with no sex difference.

Conclusions

More extended research work is needed to develop Sri Lankan reference values.