INTRODUCTION: The human orbit is a complex anatomic region. Each of its four bony walls has its own unique features and is perforated by a number of fissures and foramina that carry important nerves and blood vessels. The orbital region plays predominant role in the evaluation of craniofacial complex. Each orbit can be compared to a tiny jewel box that has very precious contents, all carefully wrapped in fat tissue. The two orbital cavities are situated on either side of the sagittal plane of the skull between the cranium and the skeleton of the face. Thus situated, they encroach about equally on these two regions. Each orbital cavity essentially is intended as a socket for eye-ball and also contains associated muscles, vessels, nerves, lacrimal apparatus, fascial strata and soft pad. In a nutshell it lodges the visual apparatus. This is an anatomical region which is of clinical & surgical interest to many disciplines like ophthalmology, oral and maxillofacial surgery and neurosurgery. The bony orbit which lodges the visual apparatus is important not only for anatomists but also for ophthalmologists, oral and maxillofacial surgeons and forensic experts.

AIM AND OBJECTIVE: To do the morphometric study of bony orbit and because knowledge regarding various parameters of orbit are helpful to ophthalmologists, neurosurgeons, maxillofacial surgeons during various surgeries. To prevent injuries to important structures during orbitotomy.

MATERIALS AND METHODS: This study was done on 24 skulls in Department of Anatomy of Osmania medical college, Koti, Hyderabad. The skulls with visible trauma, pathology and fractures were excluded from study. During this study the parameters of orbit which were measured and studied were: superior wall length, medial wall length, lateral wall length, inferior wall length, intra orbital distance (IOD) and extra orbital distance (EOD) shape and location of inferior orbital foramen was measured. Their relation with optic canal was observed. The distances were measured and photographed. The results were analysed and compared to previous studies.

RESULTS: In present study we observed that both the orbits are symmetrical and its dimensions were arranged in tabular form. From 24 skulls, 48 orbits were analysed. Superior wall length of right side was 44.75±3.13 and on the left side was 45.12±3.0.Inferior wall length of right side was 48.29±3.72 and on left side was 47.75±3.65. Medial wall length on right side was 43.95±2.64 and on left side was 42.5±1.86. Lateral wall length on right side was 46.79±2.9 and on left side was 46.33±2.42. Various types of inferior orbital fissure was observed, out of 48 orbits, type 1 was found in 37%, type 2 was found in 16%, type 3 was found in 25%, type 4 was found in 17%, type 5 was found in 5%. Out of which type 1 is most common type. Inferior orbital distance was 2.2 cm±0.24. Extra orbital distance was 10.5±0.58. which is helpful in designing various eye equipment.

CONCLUSION: Several Orbital anatomical parameters should be taken into consideration during plastic maxillofacial surgery and neurosurgery and ophthalmologist. Accurate measurements of orbital dimensions are very important in designing eye protective equipment.

KEYWORDS: Orbit, Superior Wall Length, Inferior Wall Length, Medial Wall Length, Lateral Wall Length, Intraorbital Foramen, Optic Foramen.
zygomatic bone anteriorly: the bones meet at the sphenozygomatic suture.

**MATERIALS AND METHODS:**
This study was done on 24 skulls in Department of Anatomy of Osmania medical college, kothi, Hyderabad. The skulls with visible trauma, pathology and fractures were excluded from study. During this study the parameters of orbit which were measured are superior wall length- (from supra orbital notch to superior aspect of orbital opening of optic canal), medial wall length- (midpoint of anterior lacrimal crest (ALC) to medial border of optic canal), lateral wall length- (from frontozygomatic suture to lateral border of optic canal), Inferior wall length- (from directly above infraorbital foramen to inferior aspect of orbital opening of optic canal), Intra orbital distance (IOD)- Mid points of medial margins of two orbits and extra orbital distance (EOD) -Mid points of lateral margins of two orbits. Shape and location and type of inferior orbital fissure was observed. Their relation with optic canal was observed. The distances were measured and photographed. The results were analysed and compared to previous studies.

**Fig 1 - Superior Wall Length**

**Fig 2 - Inferior Wall Length**

**Fig 3 - Medial Wall Length And Lateral Wall Length**

**Fig 4 - IOD (INTRA ORBITAL DISTANCE) EOD (EXTRA ORBITAL DISTANCE)**

**Types Of Inferior Orbital Fissure**

- **Type I Wide Concave**
- **Type II Narrow Slit Like**
- **TYPE III Rectangular Type**
of medial wall tumors, such as cavernous haemangioma, schwannoma, isolated neurofibromas. Also in trans nasal endoscopic orbital decompression, entire medial wall and medial portion of wall is removed.

**INFERIOR WAL L LENGTH OF ORBIT:**
It is useful in various procedures, exploration of fractures, decompression and maxillectomy. It is also helpful in subciliary and subtemporal approaches in inferior orbitotomy to reach orbital floor and orbital rim. Repair of orbital floor fracture. To reach orbital apex trans nasally for tissue biopsy decompression of orbit and optic nerve.

**Lateral Wall Length Of Orbit:**
It is required for excision of lacrimal gland, orbitozygomatic craniotomy, useful in retrobulbar lesions and more posterior lesions, exposure can be extended posteriorly all the way to orbital apex.

**IOD (INTRAORBITAL DISTANCE) AND EOD (EXTRA ORBITAL DISTANCE)**
Intraorbital and biorbital distance are important for maintenance of facial symmetry during both reconstructive and cosmetic operations.

Difference between intraorbital and biorbital distance need to be taken into consideration during nasal bridge reconstruction, facial cosmetic surgeries and in the design of spectacle bridges and frames. For designing protective equipment to eyes.

**REFERENCES**

**CONCLUSION:**
**SUPERIOR WALL LENGTH:**
Superior wall length is required in transcranial approach which targets intra orbital lesions through the roof of orbit and ideally suited for apical lesions and superior orbital fissure lesions so the amount of bone removal or extension needed can be guided by distances measured.

**Medial Wall Length Of Orbit:**
Medial approach is involved in several procedures, including ethmoidal vessel ligation, orbital decompression and exploration of fracture, helpful in medial orbitotomy which is effective in management...