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# **OSTEOMETRIC ANALYSIS OF SUPRAORBITAL FORAMEN AND NOTCH IN MALAYSIAN CRANIA**

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#### ABSTRACT

**Objective:** A clear knowledge of the location of supraorbital foramen (SOF) is vital for the surgeons, particularly in endoscopic surgery and regional block in crania. The aim of this study was to analyze SOF and notch in skulls of various ancestries.

**Methods:** The anatomical variations of SOF and notch were examined in 100 adults skulls (55 males and 45 females) of the Malay, Chinese, and Indian ancestries by traditional measurement made with the Osirix software. The parameters included distance between supraorbital structure and nasal midline, shape, and transverse diameter of the SOF.

**Results:** It was manifested that bilateral supraorbital notch (SON) was the most prevalent combination in both sexes and ancestries (61%), while combined SON and foramen (11%) were the least prevalent characteristic. The mean distances of supraorbital structure from nasal midline bilaterally in males were slightly greater than females. The horizontal diameter of SOF, notch and their distances from the nasal midline showed no difference between ancestries.

**Conclusion:** This study would serve as a guide for the surgeons when surgery is performed on the scalp. It can help in the precise determination of reference points for supraorbital nerve blockade for the Malaysians. In addition, the variations exhibited in supraorbital measurements inevitably revealed that sex and ancestry should be taken into consideration when choosing samples for anatomical classification of crania.

#### Keywords: Ancestry, Supraorbital foramen, Anatomy, Crania, Forensic.

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