

Oral Presentations

Abstracts of Papers Presented at 62nd National Conference of the Anatomical Society of India

1. An anatomical study of superficial palmar arch

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Background: The study of superficial palmar arch and its variations has been reported rarely. The purpose of the study is to provide assessment of anatomical variations in the formation of superficial palmar arch in hand. A classic superficial palmar arch is formed by direct communication between the superficial branch of the ulnar artery and superficial branch of radial artery.

Materials and Methods: Twenty dissected upper limb specimens, out of which 16 belonged to males and 4 to females aged between 18 and 75 years, were obtained from Department of Anatomy, Bangalore Medical College and Research Institute, Bangalore. The vascular pattern of superficial palmar arch was recorded.

Results and Discussion: The complete and incomplete formation of the superficial palmar arch was found in 19 and 1 hands respectively. This indicates that the incidences of complete and incomplete formation of superficial palmar arch are 95% and 5% respectively.

Conclusion: The findings suggest that the incomplete formation of superficial palmar arch will lead to ischemia or poor nourishment of intrinsic muscles of the hand.

2. Study of sutural variation in occipital region of human skull in central India region

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Occipital region of human skull is bounded by two lambdoid sutures extending from superior angle to lateral angle. Sutural variations are common in human skull. This study is conducted to study the sutural variations in occipital region of human skull, in reference to their embryological, evolutionary and cultural aspects. Naked eye examination of 534 human skulls available at Dept. of Anatomy and Regional Medicolegal Institute, Bhopal and various medical colleges of MP was done and variations were carefully recorded. During our study we found 27 (5.05%) skulls with sutural variation in occipital region. Complete separation of squamous part with basilar part of occipital bone by a transverse suture (Os inca totum) in 4 (0.75%) skulls. Diamond shaped formation of bone was observed between right and left lambdoid and external occipital protuberances in 4 (0.75%) skulls. There was incomplete separation of squamous part and basilar part in (Inca Bipartite) 3 skulls (0.56%). Subdivision of squamous part was into three bones (inca tripartite) in 1 skull (0.18%). Different types of pre-interparietal bone at superior angle were seen in 15 skulls (2.8%). Such variations have their embryological, anthropological, medicolegal and evolutionary importance.

3. Loss of sperm DNA integrity: Role in non-familial retinoblastoma

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Background and Objective: Poor sperm DNA quality may be the cause of childhood morbidity and mortality. Spermatozoa divide continuously and are thus the source of new mutations. Sperm is also highly vulnerable to oxidative damage. Retinoblastoma is the most common childhood tumor but its etiology is not known. Thus this study was planned with an