

The artery in adults was relatively constant in relation to surrounding structures in the petrous, cavernous and cerebral portions. The petrous ICA coursed superolaterally in carotid carteryanal, which was directed obliquely, i.e. anteromedially and the structures related to it or the artery with in it were disposed anterolateral and posteromedial to the canal. Furthermore, the cerebral part of the artery became thin walled and took gentle posterolateral curve before terminating as anterior and middle cerebral branches. The ICA in fetuses ran a relatively straighter course taking gentle curves at four sites (two intrapetrous, one cavernous and one cerebral).

Conflicts of interest

The authors have none to declare.

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43

Variations of the muscles of first extensor compartment of forearm

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Aims and objectives: To study: (i) variations in muscles of first extensor compartment of forearm with their phylogenetic and ontogenic basis; and (ii) to analyze anatomical basis of possible clinical and applied entities related to the variations.

Material and methods: For present study, 50 upper limbs from 25 adult human cadavers were dissected. Out of them, 28 were male and 22 were female limbs. Extensor compartments were opened and site, origin and insertion of muscles of first compartment were studied.

Results: Of two tendons, tendons of abductor pollicis longus (APL) were found to vary the most. This tendon was split into two to four slips in 49 of 50 (98%) cases. These slips inserted at various sites in order of frequency-base of first metacarpal, trapezium, abductor pollicis brevis, capsule of first carpometacarpal joint and volar carpal ligament. Muscle belly of extensor pollicis brevis (EPB) was present in 49 cases, either entirely distinct (30 cases), or fused to variable extent (19 cases) with muscle bellies of APL. EPB absent in 1 limb.

Conclusion: Multistranded tendon of APL offers an advantage in tendon transfer procedures. Sporadic absence of muscle belly of EPB reflects that it is phylogenetically young structure, found as a separate entity only in humans. Fusion indicates that phylogenetically EPB and APL are differentiations from a common muscle. Knowledge of existence of accessory tendons of EPB has been used for reconstructive hand surgery.

Conflicts of interest

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44

Estimation of stature from transtuberular breadth

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Aims and objectives: Stature estimation is an important tool both for medico-legal experts for identification of an individual and in the field of anthropometry. Although a number of studies have been done on stature estimation by using different body parts (foot, hand, long bones etc) but very few of them have used transtuberular breadth. The present study was undertaken to estimate stature from transtuberular breadth and to estimate the stature of individuals from transtuberular breadth using regression equations separately for males and females.

Material and methods: The present study was conducted on 200 subjects (100 male and 100 female) of 20–40 years of age. Stature was measured using anthropometer rod while transtuberular breadth was measured using round tipped spreading caliper. The collected data was recorded and statistically analyzed by using SPSS software version 20.0.

Results and conclusion: Regression equations were derived with confidence interval –0.232 to 0.927 and –0.030 to 1.009, i.e. with in 95% confidence interval in male and female respectively.

Conflicts of interest

The authors have none to declare.

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45

Entrapment neuropathy in the scapular region

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Aims and objectives: To define the prevalence of entrapment neuropathy in the scapular region and to investigate the factors leading to neural compression.

Material and Methods: 28 scapula regions obtained from human cadavers belonging to the age group between 40 and 80 years which were dissected during the routine MBBS course and studied for a period of 2 years.

Results: Of the 28 scapular regions, 3 cases showed evidences of neural compression. One was an accessory subscapularis muscle, also known as subscapularis minor or subscapularis secundum entrapping the axillary and inferior subscapular nerves. The accessory subscapularis muscle arose from ventral surface of subscapularis and ran upwards and laterally to fuse with capsule of shoulder joint. In the other two cases a communicating nerve between the radial and axillary nerve was found to be entrapped under split fibres of latissimus dorsi.

Conclusion: Entrapment neuropathy is one of the most fascinating yet most complex aspects of limb surgery. It is also quite often the most rewarding surgery in terms of clinical outcomes. A precise working knowledge of these variations and possible compressive neuropathy is important for orthopaedic surgeons, plastic surgeons and physiotherapists.

