ratio and physiological measures of fertility remain rare. Recent studies have found contradicting facts about relationship of ratio with recalled age at menarche.

**Methods:** We addressed this question in urban resident first year MBBS & nursing students of same age group. Digit ratio was calculated with the help of electronic vernier caliper and age at menarche was noted by verbal recall.

**Results:** We found non-significant correlation between right or left or combined digit ratio and recalled age at menarche.

**Conclusion:** No detectable association of between digit ratio and age at menarche is present.

#### **Conflicts of interest**

The authors have none to declare.

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## An anatomical study and clinical co-relations of mandibular foramen in dry adult human mandibles of north Indian origin



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**Introduction:** The mandibular foramen is located on the medial surface of ramus of mandible. It transmits inferior alveolar nerve. Inferior alveolar nerve block is a common procedure done by dental practioners while doing various surgeries on mandible. The aim of this study is to determine the position of mandibular foramen in respect to various landmarks present on the mandible.

**Methods:** 30 adult human dry mandibles of north Indian origin were studied. The position of mandibular foramen from various landmarks was measured on both sides of the ramus. All the measurements were taken with the help of a digital caliper as per standard anthropological conventions.

**Results:** In our study we found the mean distance from mandibular foramen to anterior border of ramus was  $16.06\pm1.99\,\mathrm{mm}$  and  $16.13\pm2.10\,\mathrm{mm}$  on the right and left sides respectively and from mandibular foramen to posterior border of ramus was  $12.02\pm1.99\,\mathrm{mm}$  and  $11.10\pm1.95\,\mathrm{mm}$  on the right and left sides respectively. The Mandibular foramen is positioned at a mean distance of  $18.79\pm2.79\,\mathrm{mm}$  on the right side and  $18.71\pm2.77\,\mathrm{mm}$  on the left side, from the mandibular notch.

**Conclusion:** In the present study the localization of mandibular foramen presented great variation. However if we keep these anatomical landmarks in our mind we can accurately locate the position of mandibular foramen and this will help us to create successful anesthesia and to perform good surgeries on the mandible.

### **Conflicts of interest**

The author has none to declare.

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## Variations in the external morphology of gall bladder: A cadaveric study in south coastal population



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**Background:** Variations in the pattern of the extra hepatic biliary tract are usual and are commonly encountered during some radiological investigations or in operation theatres. Such variations of the morphology of gall bladder have been well documented in the literature for many years but a detail morphological study of variations of the gall bladder and its incidence is very rare. In this era of quick results, increasing use of diagnostic and interventional procedures makes it important to study variations of gall bladder morphology. Most of the interventional procedures in this modern era are done laparoscopically and there is tremendous increase in the number of laparoscopic cholecystectomies. So, sound knowledge of possible variations in morphology of gall bladder is important.

**Materials and methods:** This study was undertaken on 90 cadaveric liver and gall bladder specimens in terms of length, maximum transverse diameter, and shape, external variations of gall bladder, interior and length of gall bladder below the inferior border of the liver.

**Results:** Gall bladder had length ranging between 3 and 10 cm, transverse diameter between 2.0 and 5.0 cm. The commonest shape observed in this study was pear shaped in 82.22% of cases. The length of gall bladder below the inferior border of liver varied between 0.4 and 2.5 cm.

**Conclusion:** The growing importance of such variations, lie not only from the point of biliary disease but also with respect to the various invasive techniques in the diagnosis and treatment of gall bladder and extra hepatic bile duct disease.

#### **Conflicts of interest**

The authors have none to declare.

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# Anatomical study of supratrochlear foramen of humerus and its clinical significance



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**Introduction:** Supratrochlear foramen (STF) is located on the bony septum that separates the olecranon fossa, at the lower end of humerus. The present study is aimed to observe STF, along with the morphometric study of its shape, transverse and vertical diameter of foramina.

**Material and method:** Dried human 250 bones of unknown age and sex, free from pathological changes obtained from the bone store of the Department of Anatomy, Medical College Baroda. The presence of STF and its shape was observed, further classified into round and oval. The transverse and vertical diameter were measured by the digital vernier caliper and obtained data were analyzed statistically.

**Result:** Out of the 250 humerus STF was found in 81 bones, showed total incidence of 32.4%, on right side 26.4% (33 out of 125) and on left side 38.4% (48 out of 125). The round and oval shape