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## A study of abdominal wall perforators from deep inferior epigastric artery



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**Aims and objectives:** The deep inferior epigastric perforator flap is based on the perforator arteries of the deep inferior epigastric artery. The rectus abdominis muscle provides an excellent myocutaneous flap, either pedicled or free, because of the rich vascularity provided by the epigastric vessels and separation of muscle belly from the surrounding tissue within the rectus sheath.

**Material and methods:** The study was conducted on 30 adult cadavers. The length and width of the rectus abdominis muscle and length, direction, muscular branches of the perforator, branching pattern and termination of the inferior epigastric artery were observed.

**Results:** The diameter of inferior epigastric artery at the point of origin was between 2.1 and 3.5 mm, the artery dividing into two major branches was seen in 11 cases, the lateral branch being dominant in 3 cases, the medial branch in 3, both branches having equal caliber in 5 cases and in 19 cases there was one central axis with multiple side branches. Total number of perforators was 243. In 101 cases diameters was between 0.5 mm and 1.0 mm, and 139 exceeded 1.0 mm. The average running distance was 7.20 mm. Fifty-one percent perforators were present above the level of the umbilicus and 49% below. On each side 43% ideal perforators were present.

**Conclusion:** Majority of ideal perforators (72%) were concentrated 4 cm superiorly, 7 cm inferiorly and 5 cm laterally to the umbilicus. Our data inferred that 43% of all perforators with diameters over 1 mm are ideal perforators and most are located about a 5 cm radius around the umbilicus can easily be dissected.

#### **Conflicts of interest**

The authors have none to declare.

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### Morphometric analysis of the first rib in dry bones



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**Aims and objectives:** Interscalene triangle is formed by the anterior and middle scalene muscles with the first rib, through which the brachial plexus and the subclavian artery pass to the costoclavicular space. Compression of these structures leads to symptoms of thoracic outlet syndrome. To calculate the ratio between the interscalene distance and inner circumferential length of the first rib in one hundred dry bones.

**Material and methods:** A cotton thread and vernier calipers to measure: (i) the inner circumferential length (ICL) of the first rib; and (ii) the interscalene distance (ISD) of the first rib. The ratio

between the interscalene distances to inner circumferential length of first rib was calculated.

**Results:** The value of ICL was 70 mm in the following bones 16,21,29,82 then the value of ISD were 15,11,14,8 respectively and the ratio between ISD to ICL for bone no. 16 was 0.21, for bone no. 21 was 0.16, for bone no. 29 was 0.20 and for bone no. 82 is 0.11 respectively. It was noted that if ISD value decreases, subsequently the ISD to ICL ratio was also decreased. The same result was seen in all other bones. Total 100 first ribs ISD mean value were 12.07.

**Conclusion:** A decrease in ISD value shows a subsequent decrease in the ISD to ICL ratio. Clinical significance of the ratio will be discussed.

#### **Conflicts of interest**

The authors have none to declare.

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### Study of annular pancreas – A rare finding



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**Aims and objectives:** Annular pancreas is a rare congenital developmental anomaly characterized by presence of ring of pancreatic tissue around the second part of duodenum. Rarely it can present in late adult life with wide range of clinical severities there by making its early diagnosis difficult. Frequency of this anomaly is nearly equal in infants and in adults. Aim of the study was to see incidence of annular pancreas in cadavers, to explain it embryologically and correlate it clinically.

**Material and methods:** 50 formalin fixed cadavers were dissected, the stomach was removed and the pancreatic tissue was dissected in detail, any variations seen were noted and photographed.

**Results:** 2 out of 50 cadavers showed presence of complete annular pancreas and 2 cadavers showed incomplete pancreatic tissue around the 2nd part of duodenum.

**Conclusion:** Annular pancreas involves a portion of pancreas winding around the posterior and right lateral side of second part of duodenum, to overlap it anteriorly. It can present as duodenal obstruction in new born and as pancreatitis, peptic ulcer and several other conditions in adults. But still surgery is necessary to confirm the diagnosis and a range of surgical procedures can be carried out to bypass the obstructed segment.

#### **Conflicts of interest**

The authors have none to declare.

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# A study on the bifurcation of sciatic nerve with clinical significance



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**Aims and objectives:** Since the point of bifurcation of the sciatic nerve is very much variable. The aim of the present study was