

## Variation in location of superior and inferior parathyroid glands

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Parathyroid generally lies on posterior surface of thyroid lobe (TL). Superior parathyroids (SPG) were relatively more constant in location than inferior parathyroids (IPG). Undetected parathyroid might be a causative factor for recurrent hyperparathyroidism. Hundred fresh postmortem adult normal thyroid glands were collected from Judicial Medical Office, Colombo South Teaching Hospital to determine location of SPG and IPG in relation with TL. Length of TL was measured by vernier caliper and divided into three equal portions as upper, middle and lower 1/3rd by two imaginary horizontal lines. Parathyroids were identified under dissection microscope and later confirmed by histological methods. Total of 80% (320/400) parathyroids were identified and out of it, 48.75% (156/320) were located either at upper 1/3rd or middle 1/3rd of TL, considered as SPG. A percentage of 47.18 (151/320) were located at lower 1/3rd portion or just below lower pole, considered as IPG and 4.06% (13/320) were located at junction of middle or lower 1/3rd, considered as either superior or inferior. Out of SPG, 96.79% (151/156) were located at posterior surface, 1.92% (3/156) were located at medial surface and hidden by ligament of Berry. A percentage of 1.28 (2/156) were located at anterior surface of thyroid. Out of IPG, 60.26% (91/151) were located at posterior surface, 30.46% (46/151) were located at posterolateral surface, and 9.27% (14/151) were located at anterior surface just below lower border of isthmus on tracheal rings. SPG and ultimobranchial body were developed from fourth pharyngeal pouch. Most of SPG (96.79%) were more constant at posterior surface. IPG developed with thymus gland and more variably located in posterior, posterolateral and anterior surfaces of thyroid.

**Keywords:** Parathyroids, thyroid lobe, location