

Info	
Origins	-head & neck: pharyngeal apparatus
Pharyngeal apparatus	<ul style="list-style-type: none"> -formed of: arch, pouches, grooves & membranes -mesoderm: core, makes the masses (arches) -ectoderm: outside covering, makes the grooves -endoderm: inside lining, makes the pouches -pouches & grooves are the spaces in between 2 arches
Pouches	<ul style="list-style-type: none"> -develop as pairs -develop in cranio-caudal fashion -total # = 4 (the 5th pair always degenerates away) -first pair lies <u>btw 1st & 2nd arches</u>
Clinically	<p>During subtotal thyroidectomy</p> <ul style="list-style-type: none"> -S. thyroid artery is ligated within the upper pole of the gland (to preserve <u>External laryngeal N</u>) -I. thyroid artery is ligated away from the gland (to preserve <u>Recurrent laryngeal N</u>) (the nerve highly varies in its position of “the triangle”) (the triangle: L=CCA, M=trachea, S=thyroid gland) <p>(lesion in either causes hoarseness of voice, or breathing problems)</p>

Thyroid embryo

Order	Very first ECS gland to develop
Starter	The 24 th day
Origin	-Endoderm of primitive pharynx (its floor), thyroid primordium region -foramen cecum, the junc btw A2/3 & I1/3 of the tongue
Changes	When tongue starts developing -thyroid descends down the neck, A. to hyoid bone & larynx cartilages -thyroid remained connected to its BFF "the tongue" by <u>thyroglossal duct</u> ,
Finished by	50 th day
<u>thyroglossal duct fate</u>	-the upper part: persists forever, (in P. of the tongue "as foramen cecum") -the lower part: persists in 50% of the world's population (forms pyramidal thyroid lobe "the third lobe", it att to hyoid bone by either <u>fibrous</u> or <u>SMCs</u> "glandula thyroidea")
Path	-thyroid agenesis -cong. Hypotism -thyroglossal duct persistence -thyroglossal cyst -accessory thyroid tissue -ectopic thyroid gland (the gland might stop descending at any point, or descend further to thoracic cavity)

ParaThyroid embryo

Origin	-P. of 3 rd pouch: gives I. paraT -P. of 4 th pouch: gives S. paraT -A. of 3 rd pouch: gives thymus embryo -A. of 4 th pouch: gives ultimopharngal body
Starter	Day 40
Changes	-as the thymus descend down to thoracic cavity, it pushes I. paraT to its position