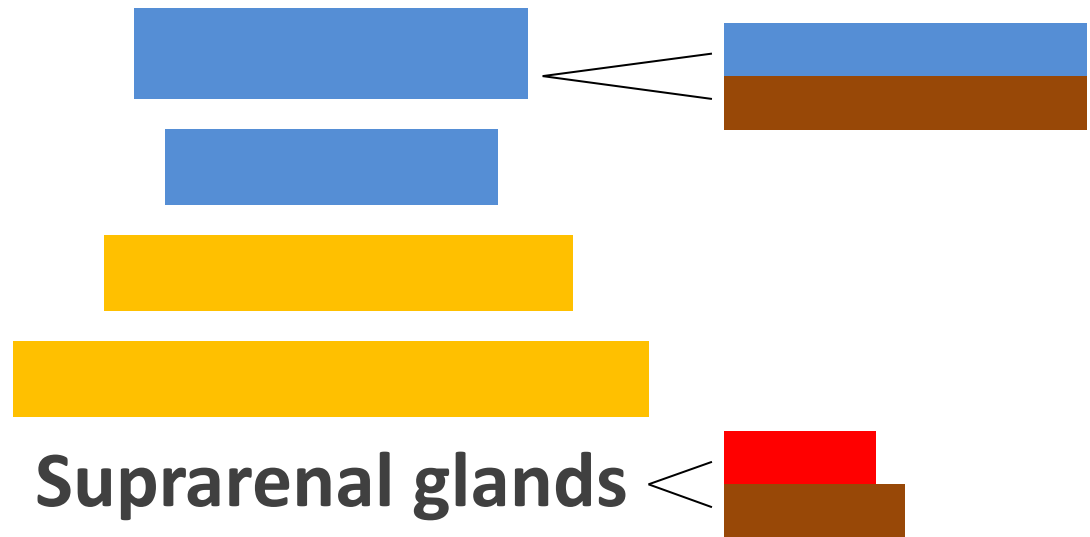
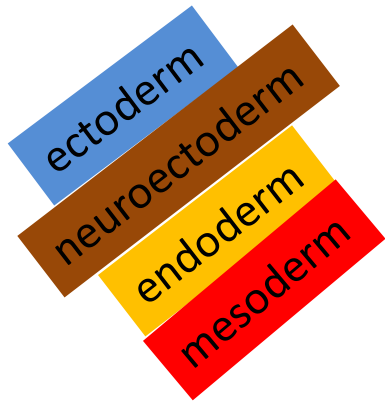
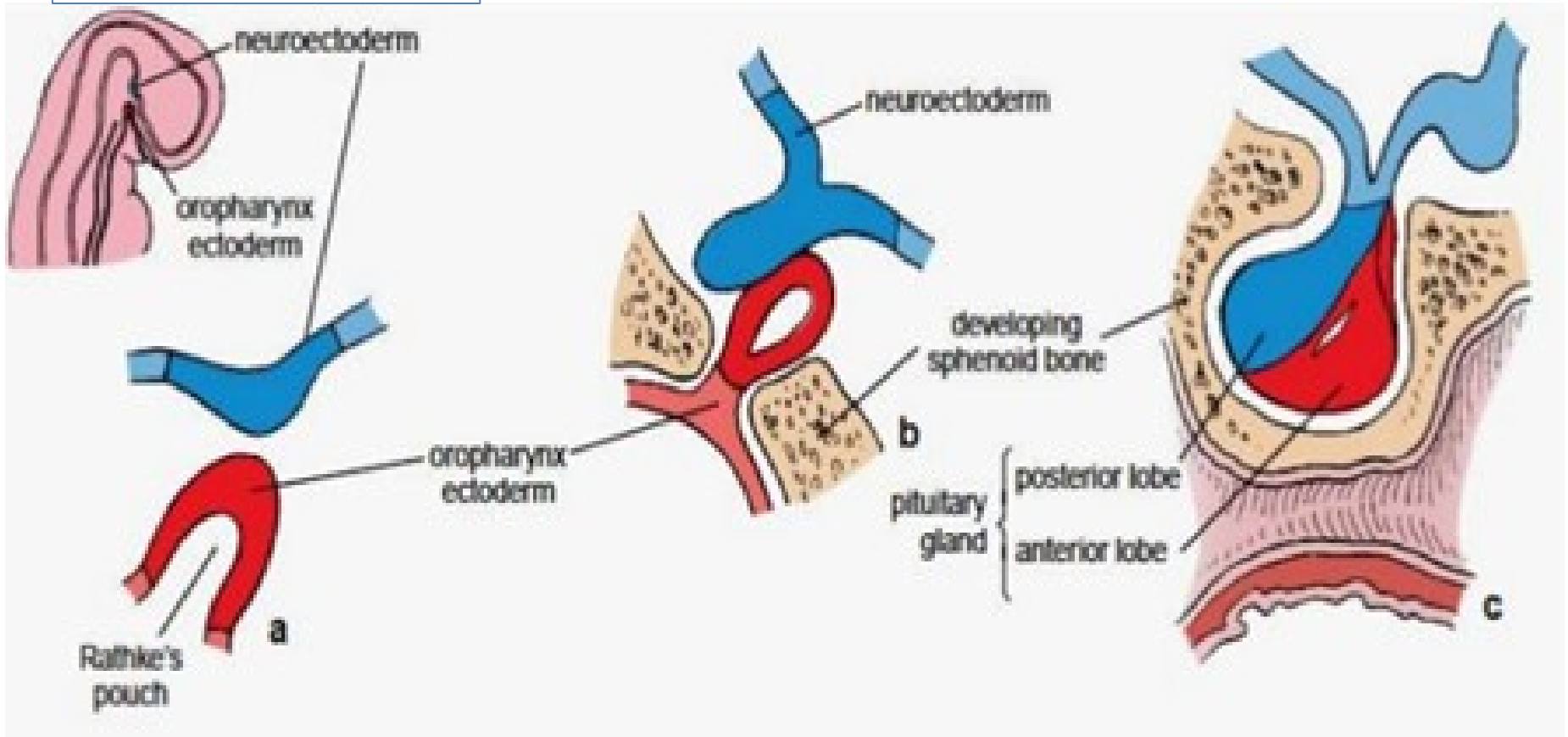
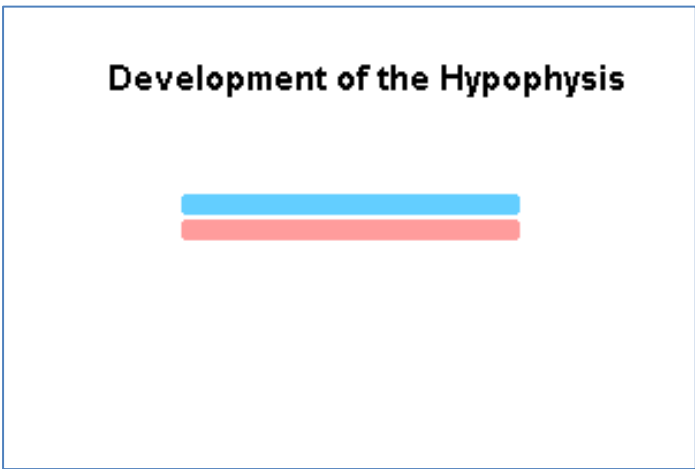
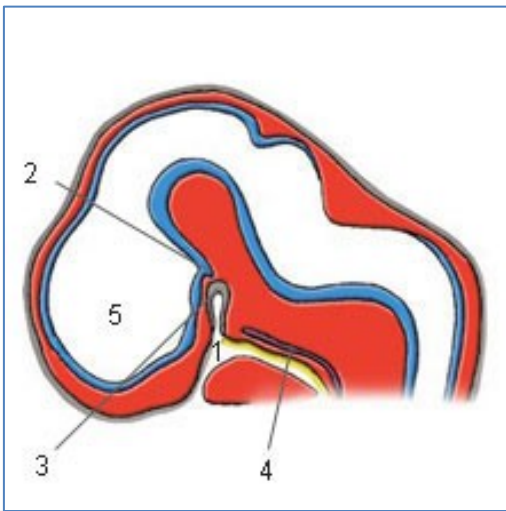


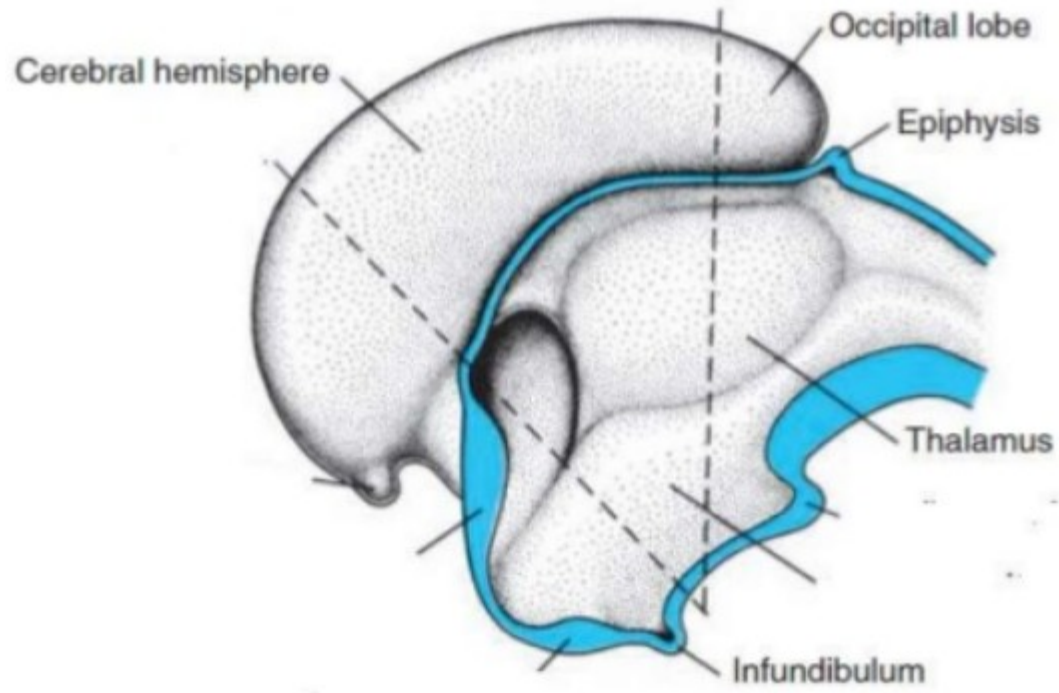
Development of endocrine glands

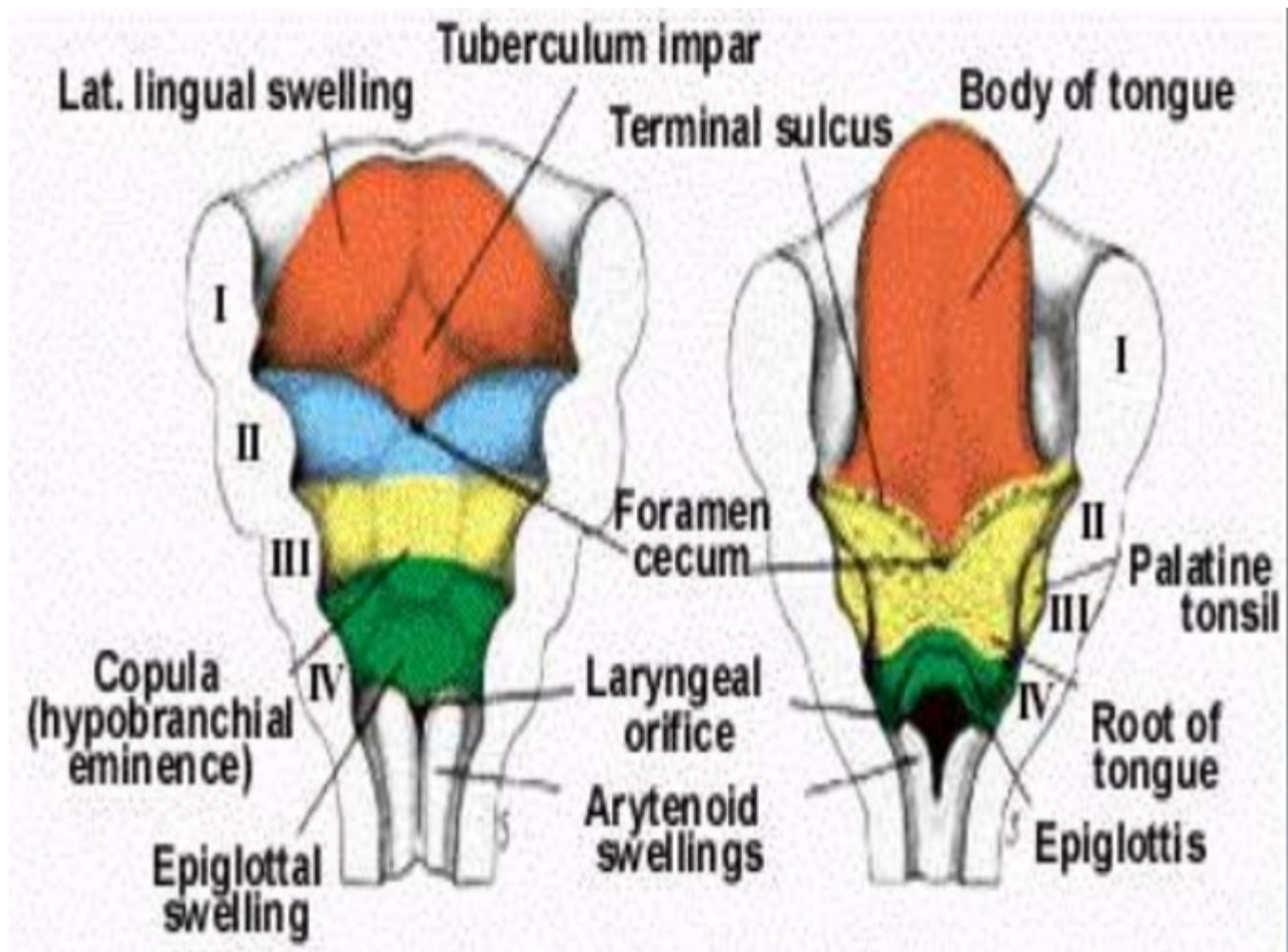




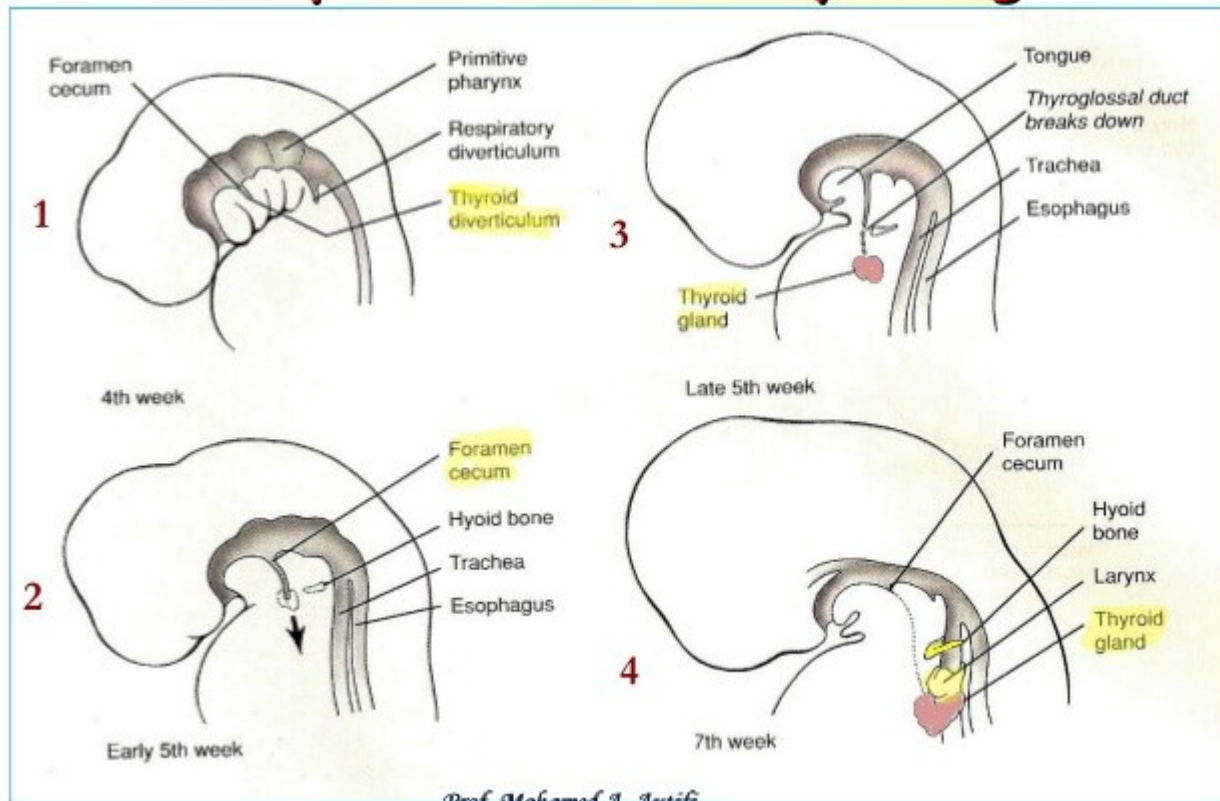
Possible congenital anomalies

- Ectopic posterior pituitary
- Pharyngeal hypophysis
- Agenesis/Hypogenesis of pituitary gland
- Duplication of pituitary gland
- Congenital tumor of the gland
(Craniopharyngioma)

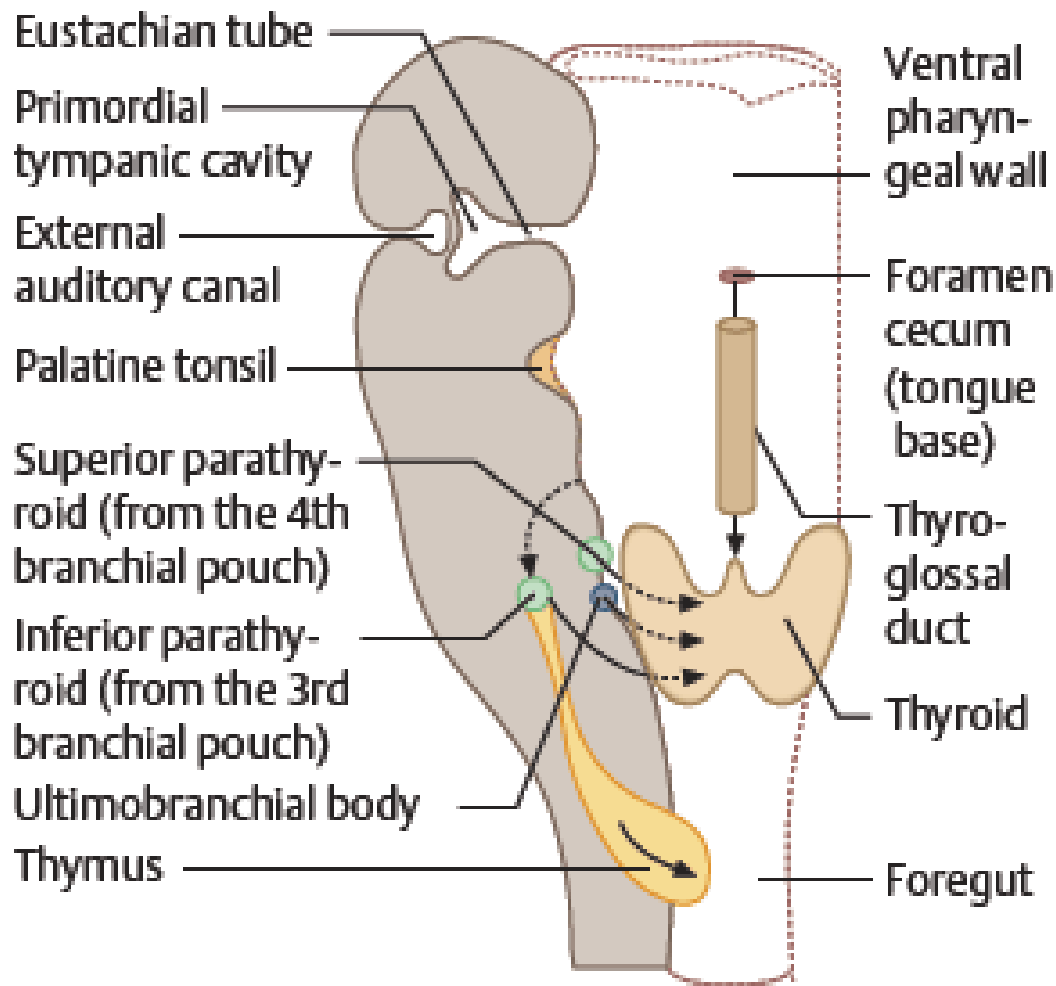




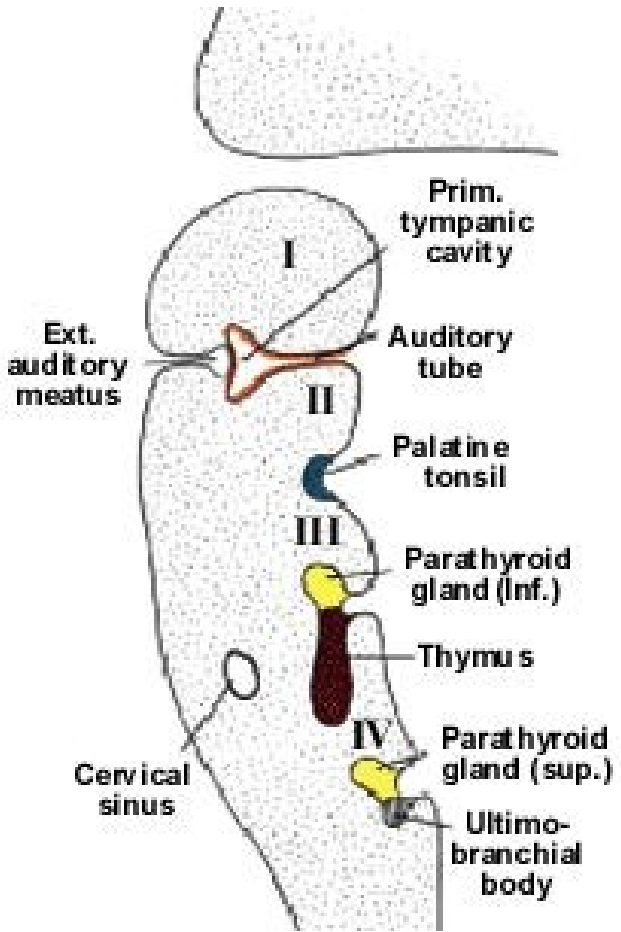
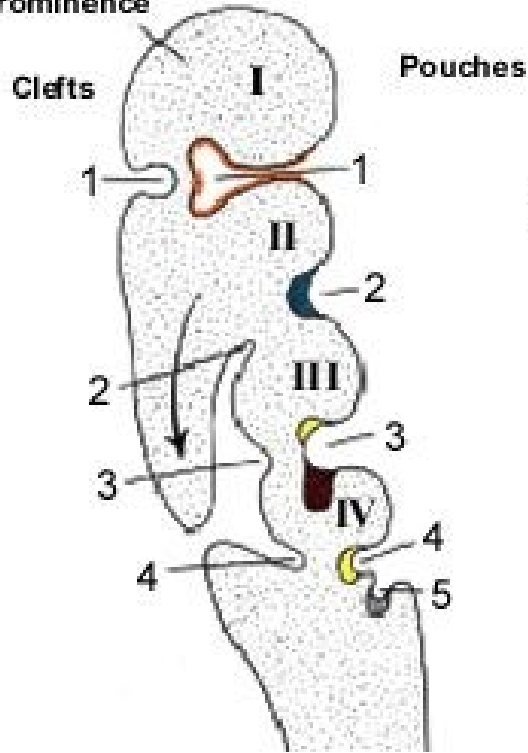
Development of the thyroid gland

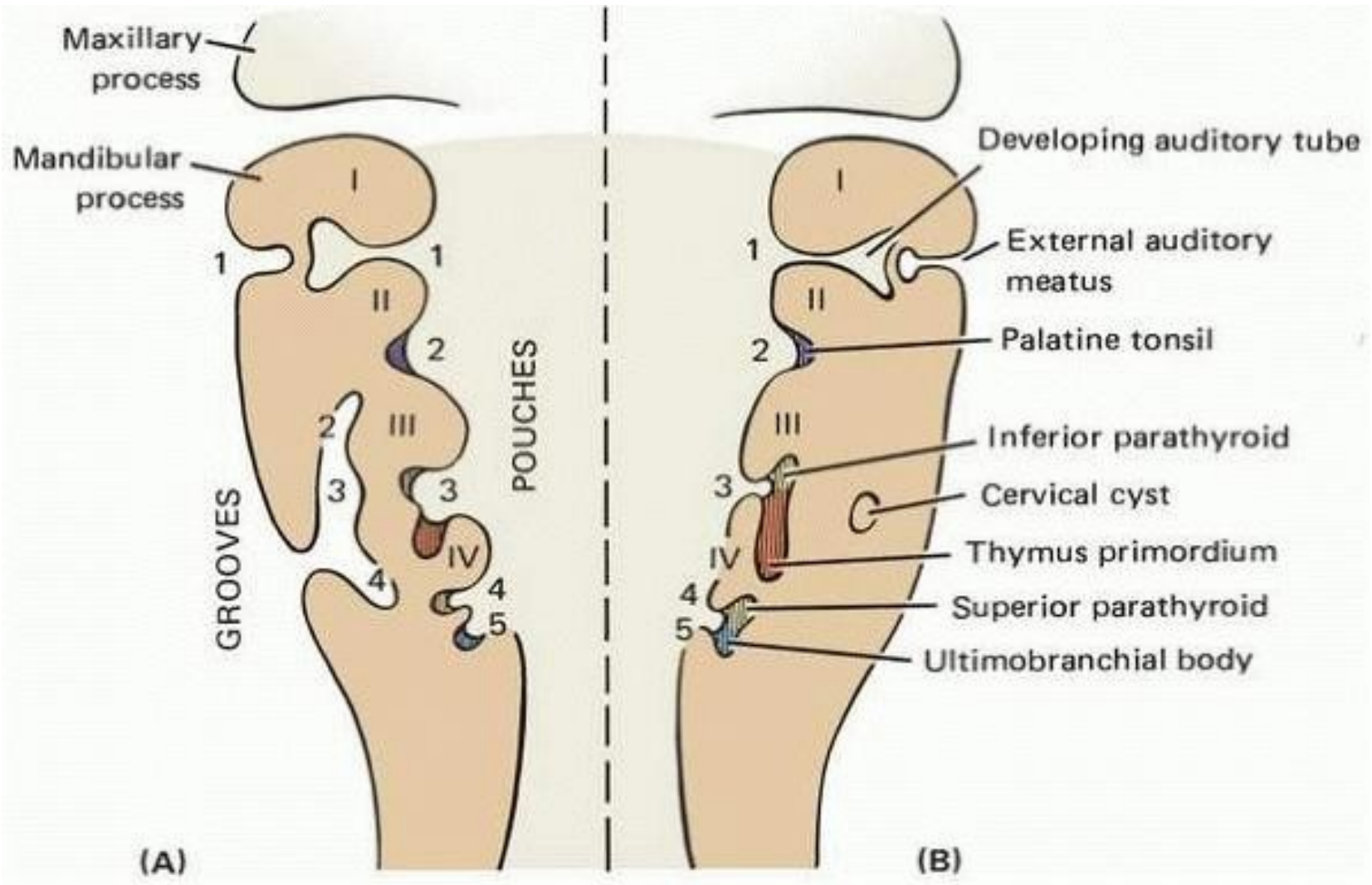


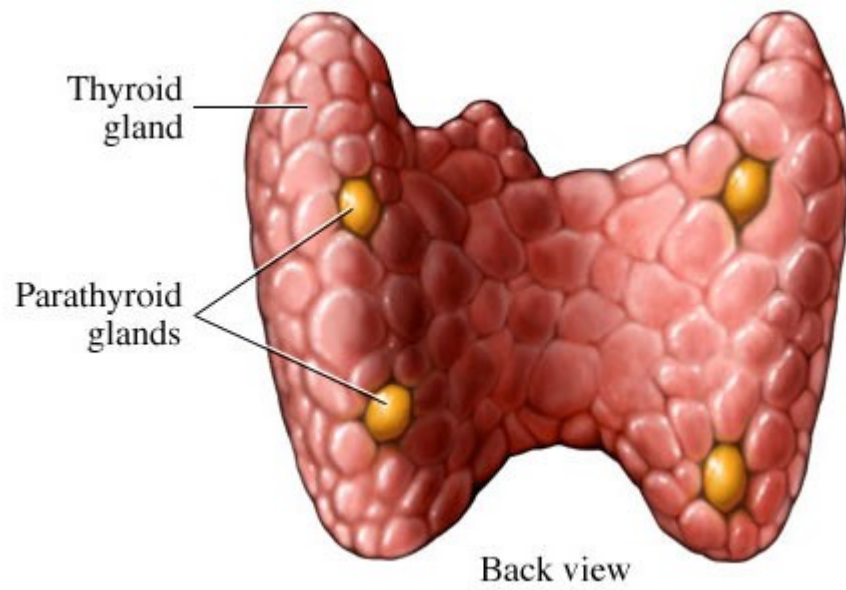
Prof. Mohamed A. Autifi



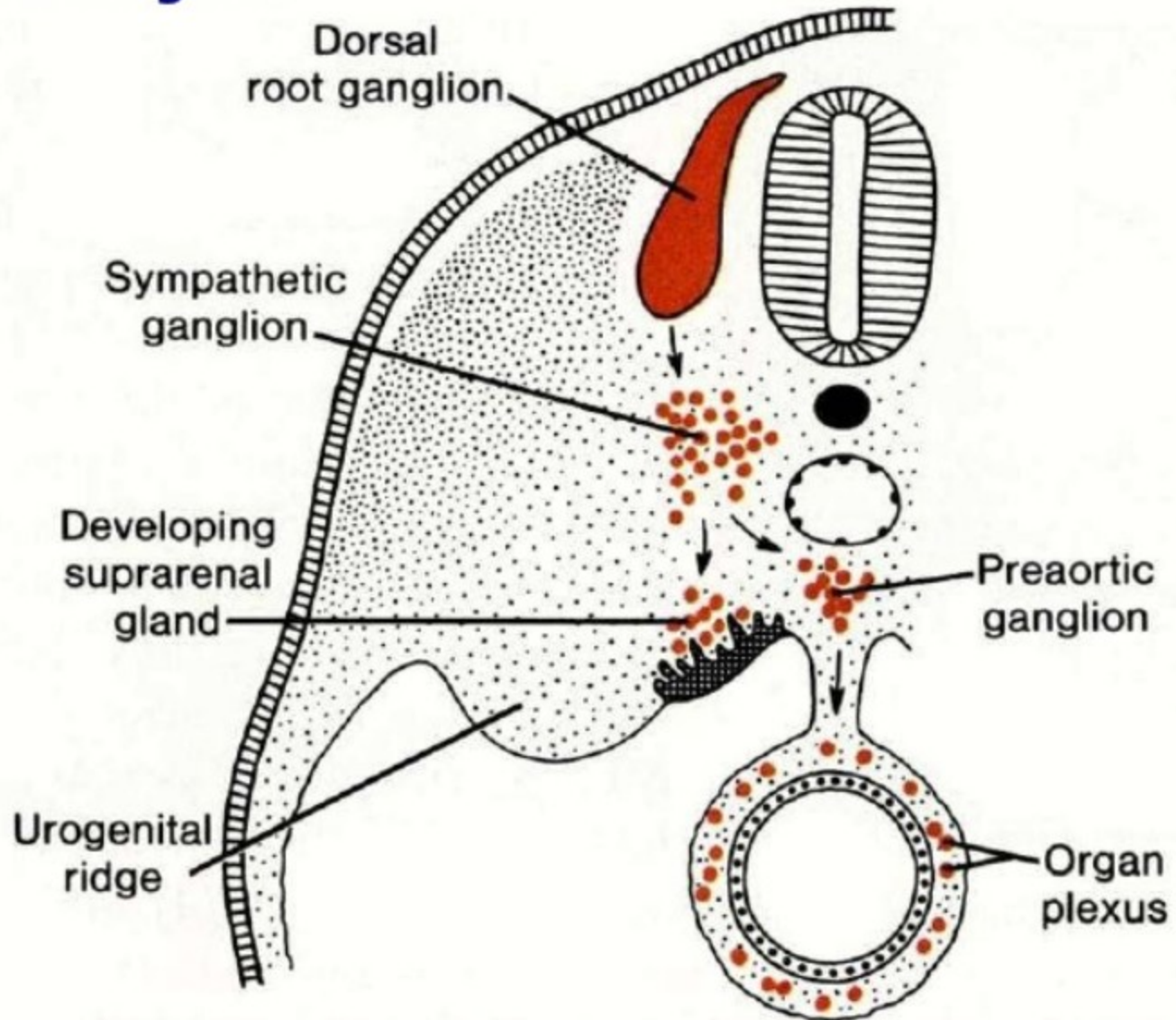
Maxillary Prominence
Mandibular Prominence



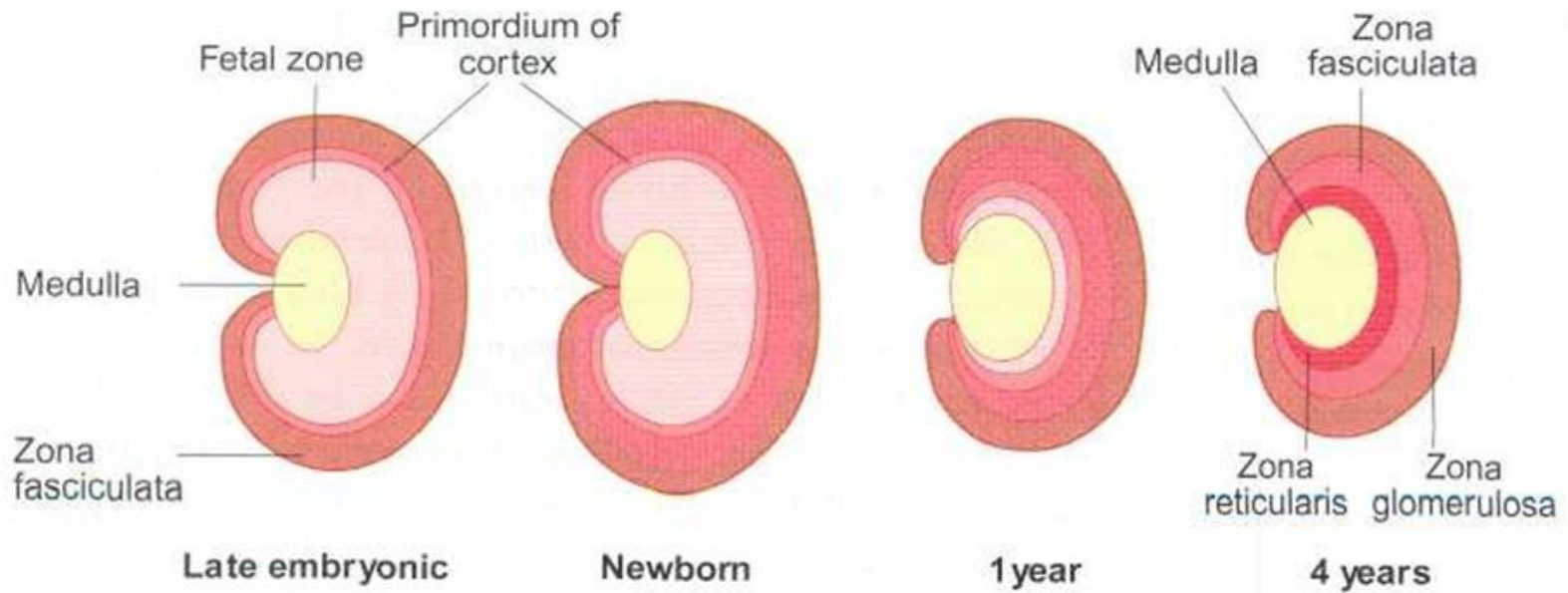




Adrenal gland



Schematic diagram showing the changes in the adrenal gland during development.



Adrenal gland

Congenital anomalies

1. Ectopic adrenal tissue/adrenal gland:

The adrenal tissue or complete adrenal gland may be found fused to kidney deep in its capsule or in the right lobe of the liver.

2. adrenal hyperplasia

a) Congenital adrenal hyperplasia:

✓ It is most commonly caused by mutation of genes for enzymes involved in adrenocortical steroid biosynthesis (e.g., 21-hydroxylase deficiency),

b) Adrenogenital syndrome:

✓ It occurs due to congenital hyperplasia of the cells of the adrenal cortex, which secrete androgen.

✓ C/F differ in male and female :

(a) In male: (adrenogenital syndrome)

It leads to a very early development of secondary sexual characters.

(b) In female: (pseudohermaphroditism)

female child may be mistaken as a male.