

Endocrine System

刘佳梅

compose:

endocrine organ:

thyroid gland, parathyroid gland

adrenal gland, hypophysis

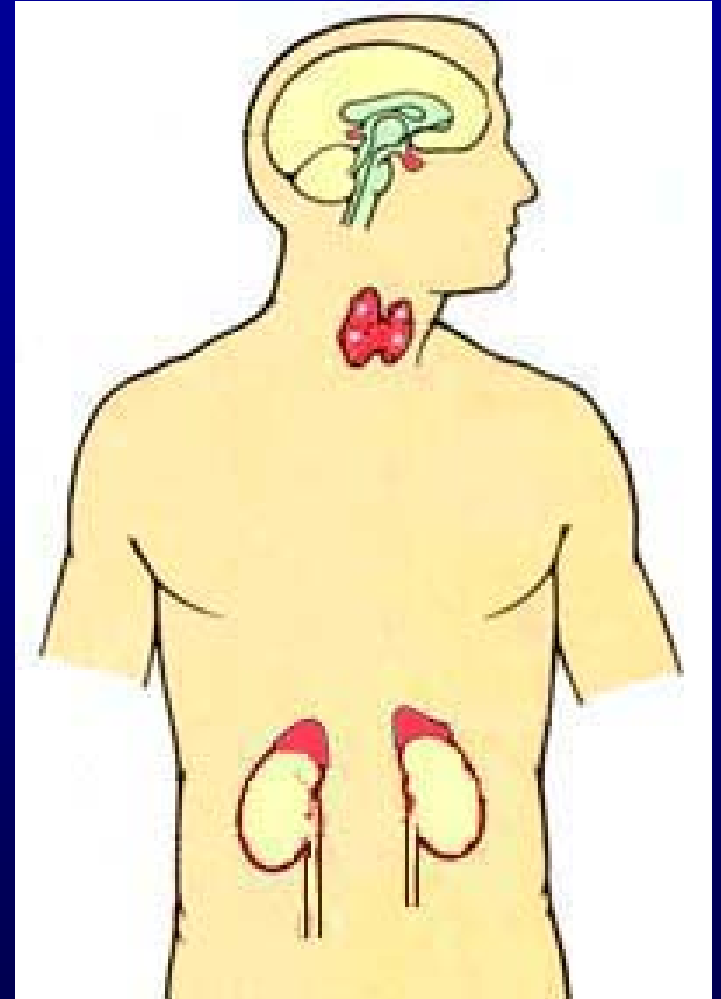
pineal body

endocrine tissue

endocrine cell : hormone

Protein secreting cell

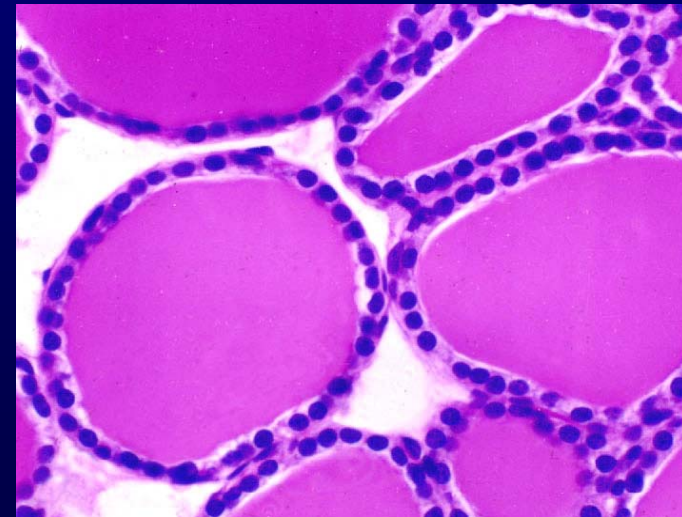
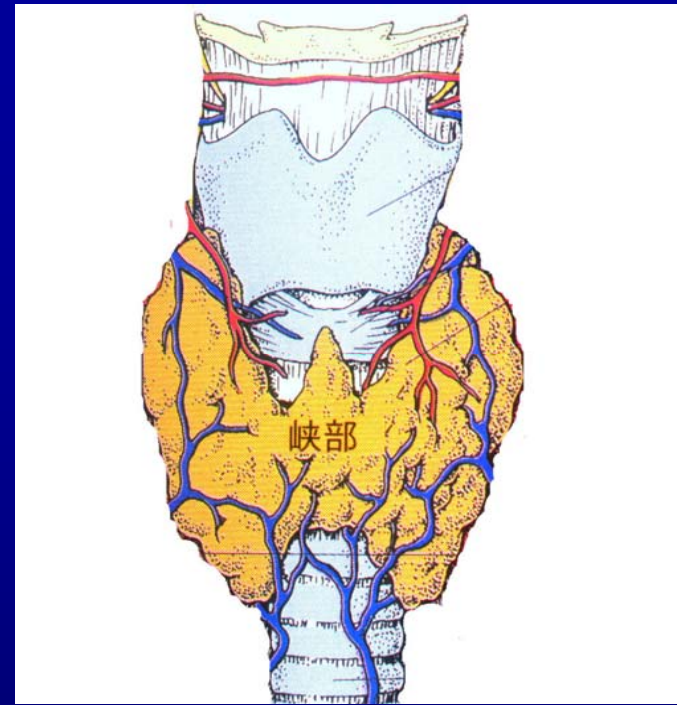
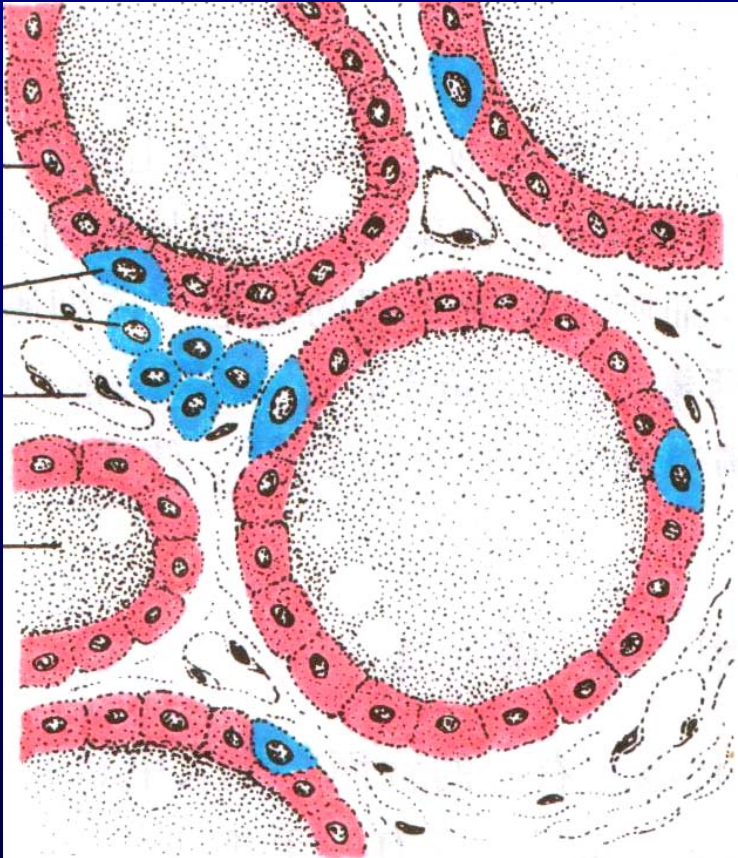
Steroid secreting cell



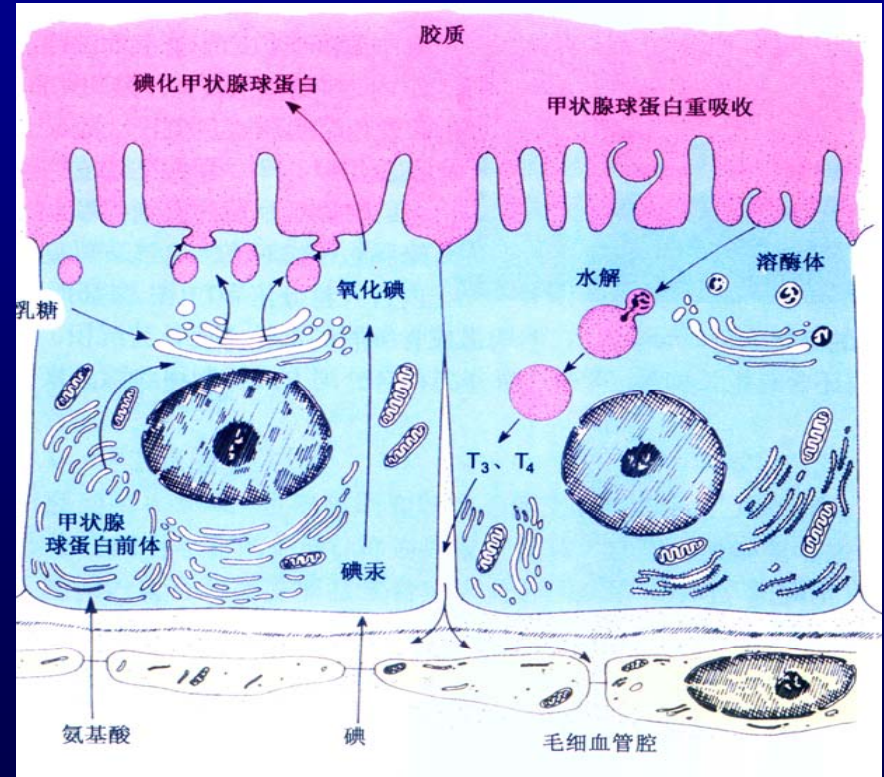
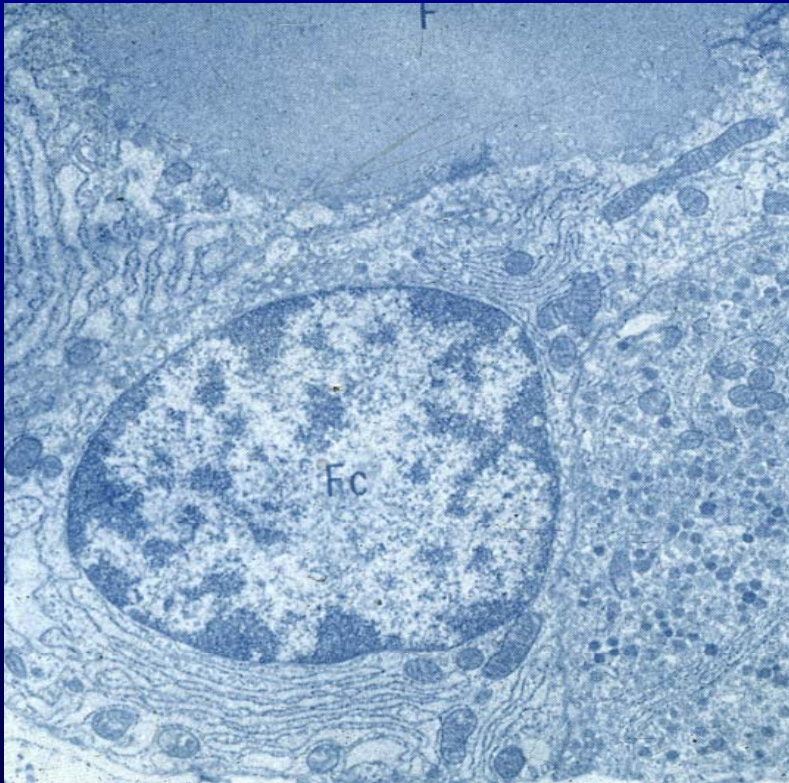
I thyroid gland

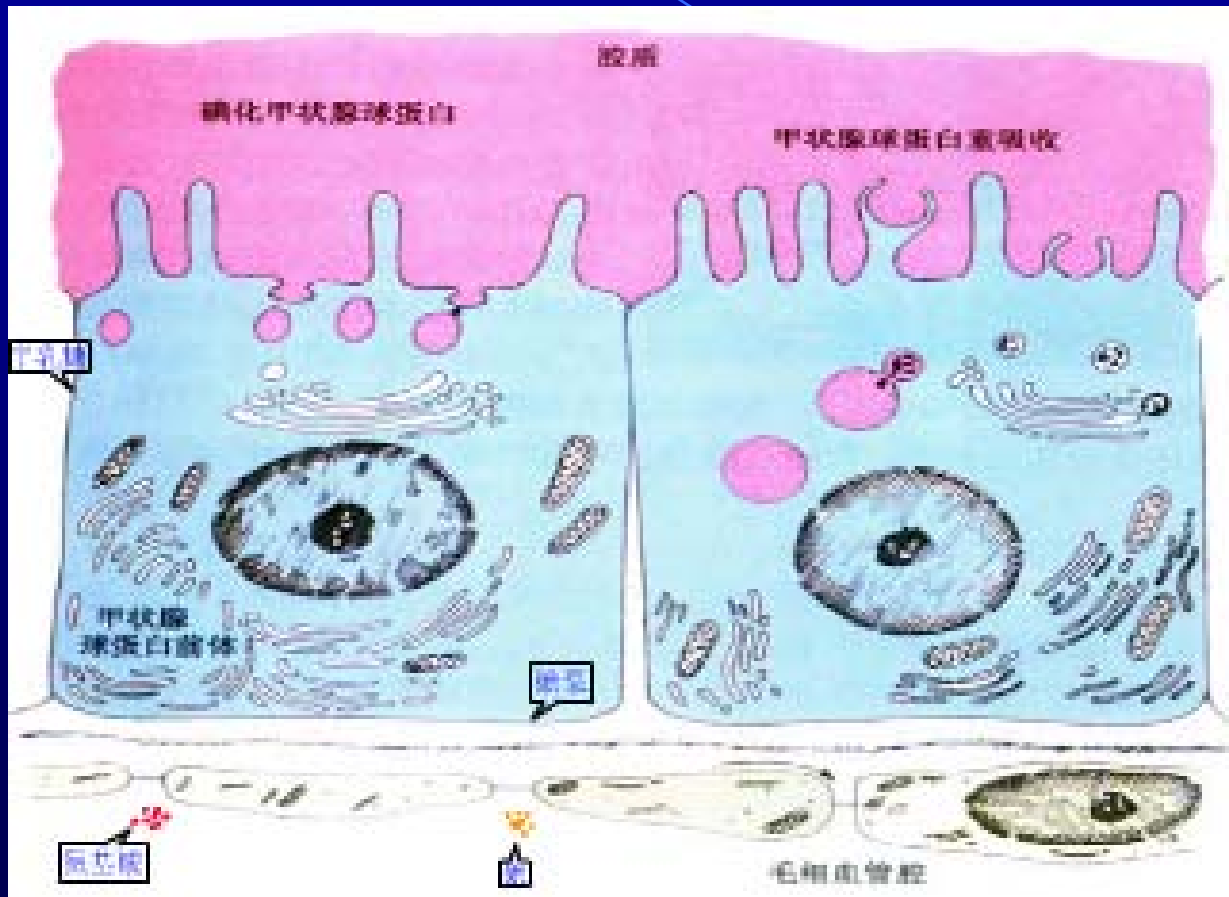
1. follicle

follicular epithelial cells
colloid: thyroglobulin

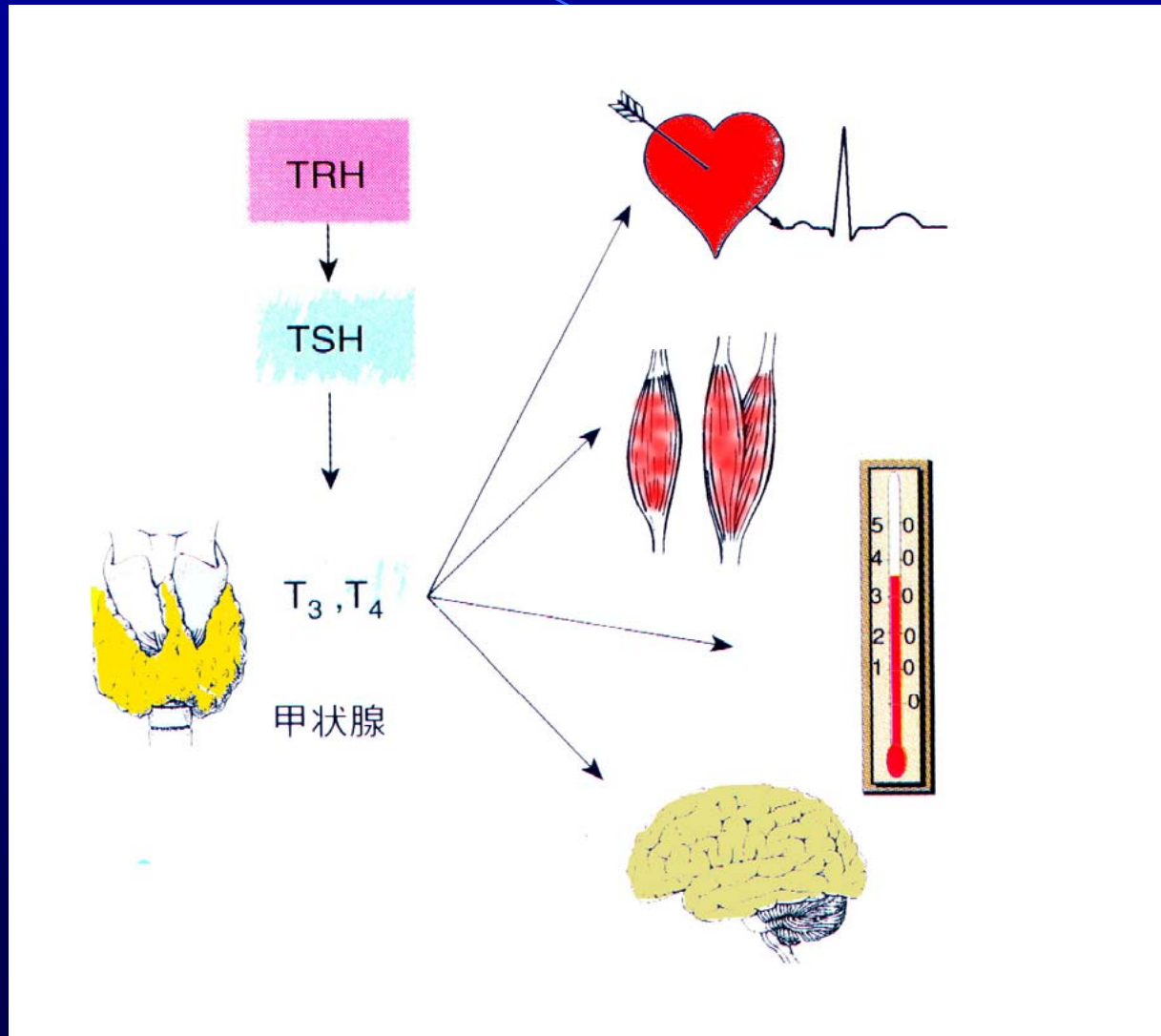


process of synthesis and secretion thyroxine of follicular epithelial cells:

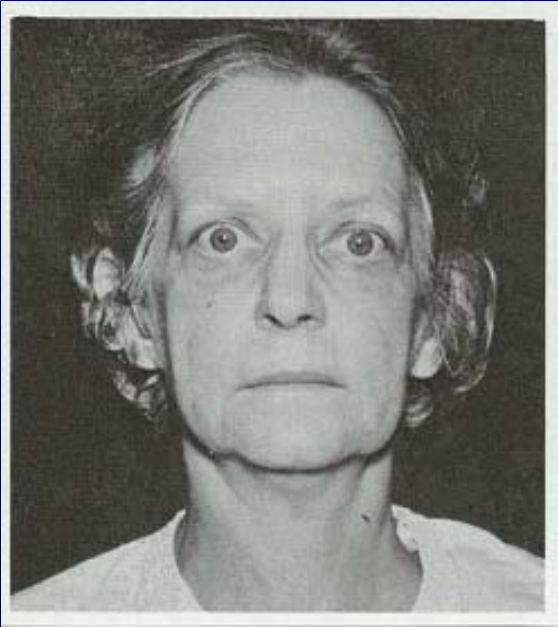




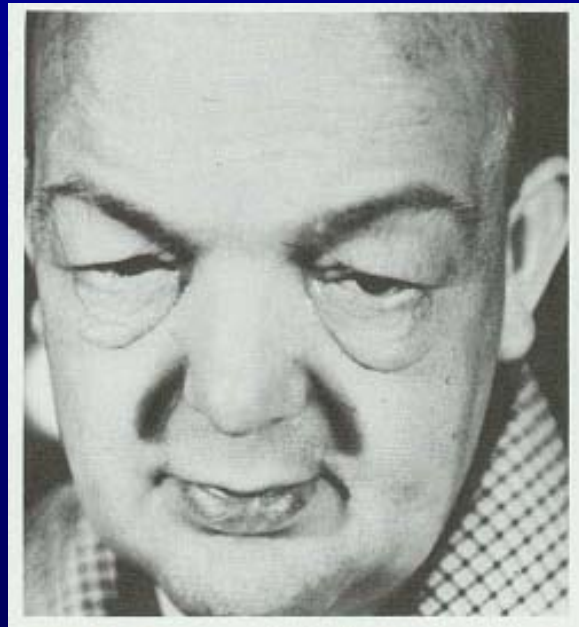
function of thyroid



甲状腺素引起的临床疾病



甲亢



甲低



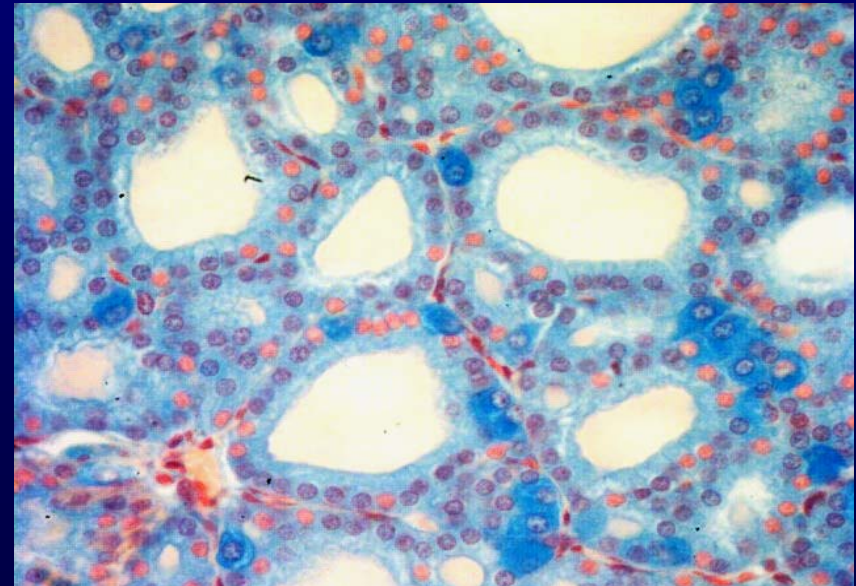
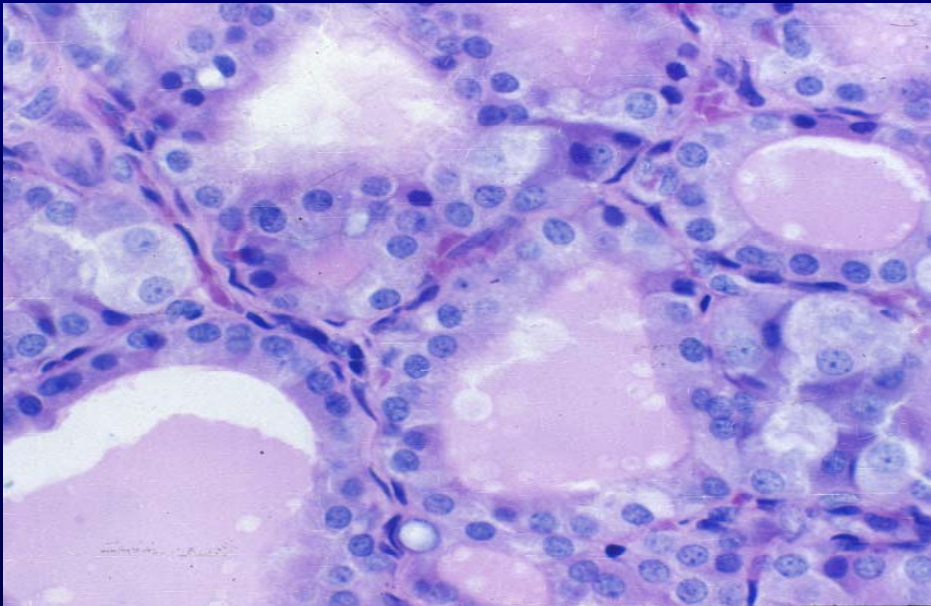
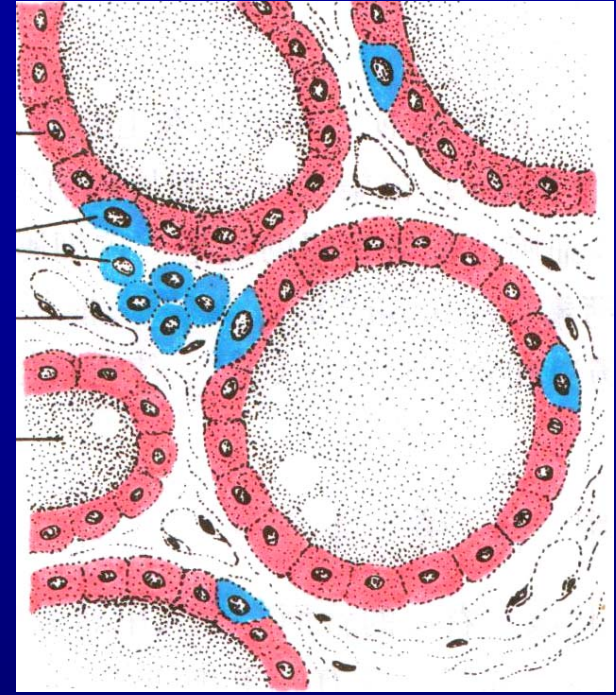
甲状腺肿大

2 parafollicular cell

LM: large , pale staining

EM: protein- secreting cells

function: secreting calcitonin



II parathyroid gland

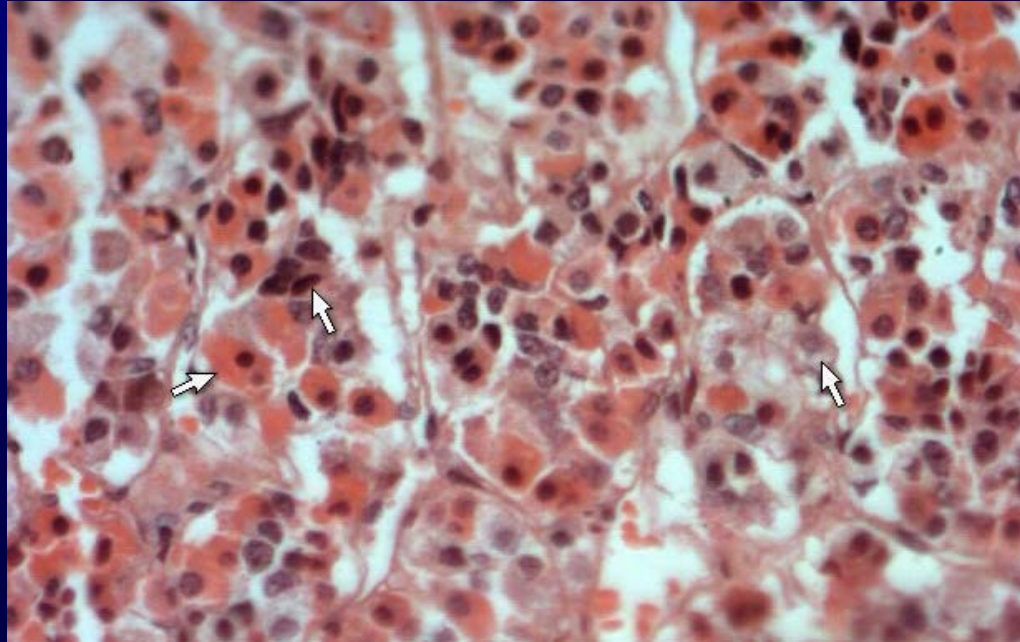
capsule

1.chief cell

LM: round, pale staining, slightly acidophilic

function: secreting parathyroid hormone , PTH

2.acidophilic cell



III adrenal gland capsule

1. Adrenal cortex

1.1 zona glomerulosa

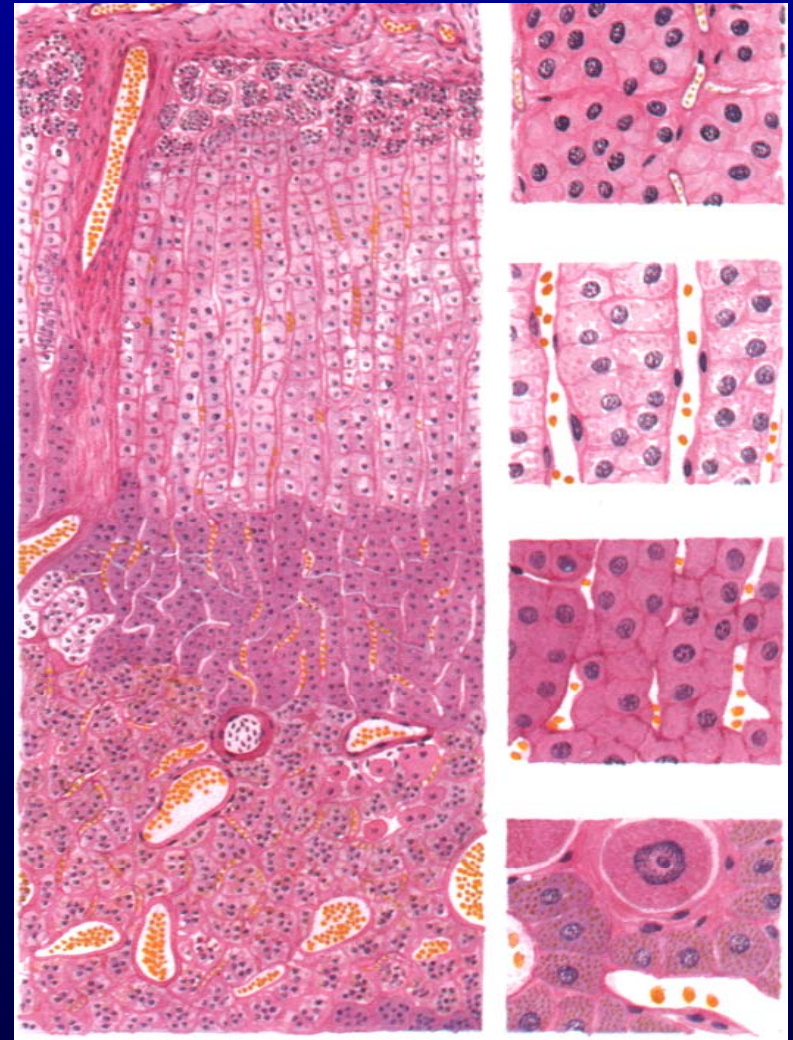
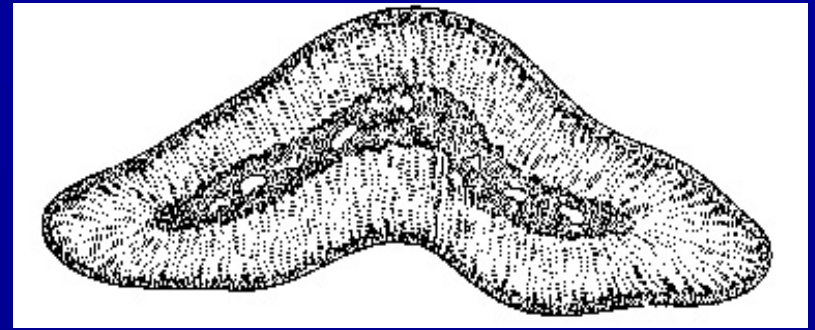
mineralocorticoid: aldosterone

1.2 zona fasciculata

glucocorticoid

1.3 zona reticularis

androgen, small amount of
glucocorticoid, estrogen

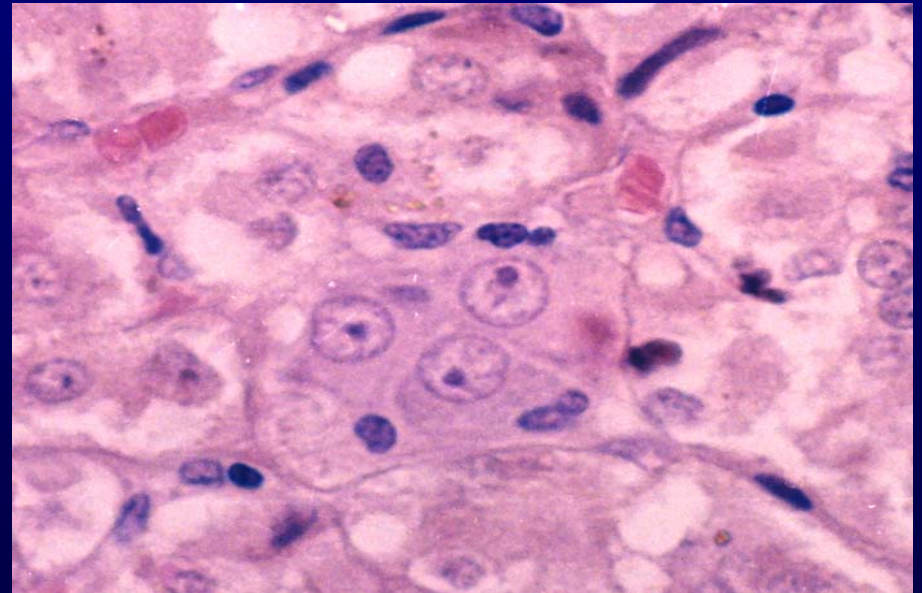
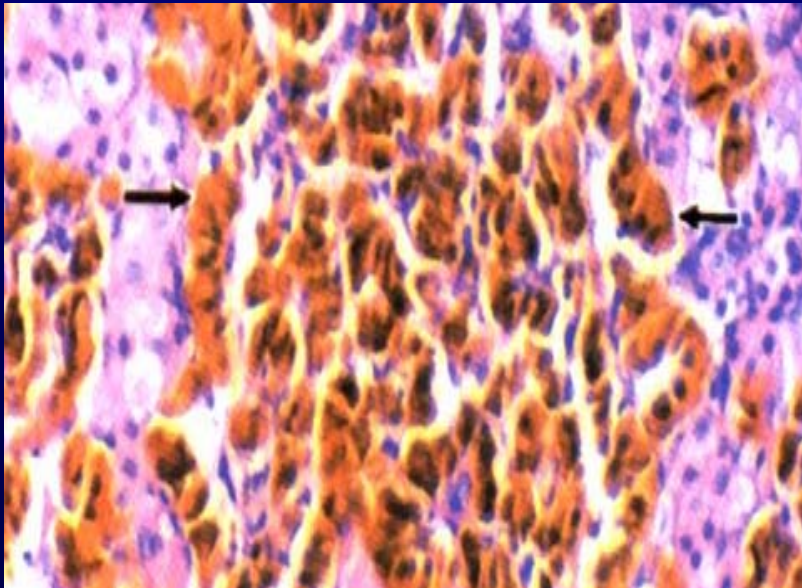
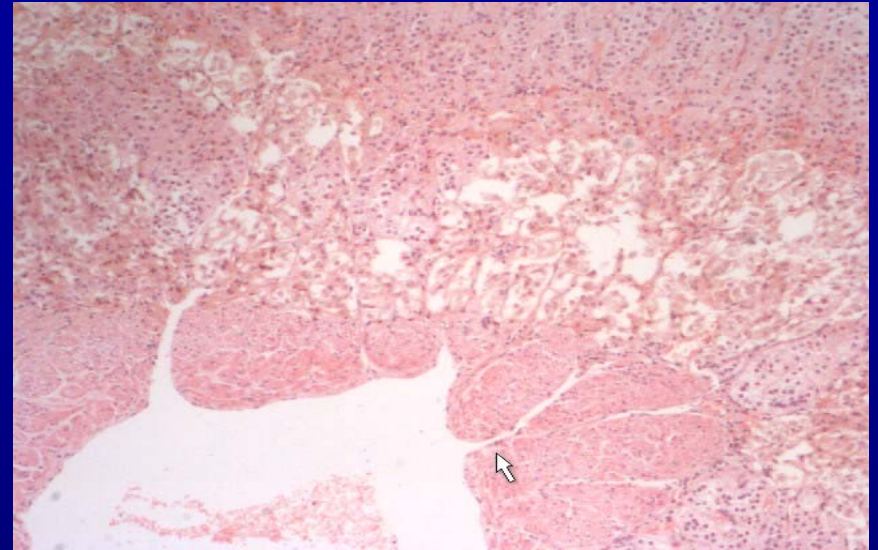


2.medulla

chromaffin cells

Centre vein

sympathetic ganglion cell



IV hypophysis

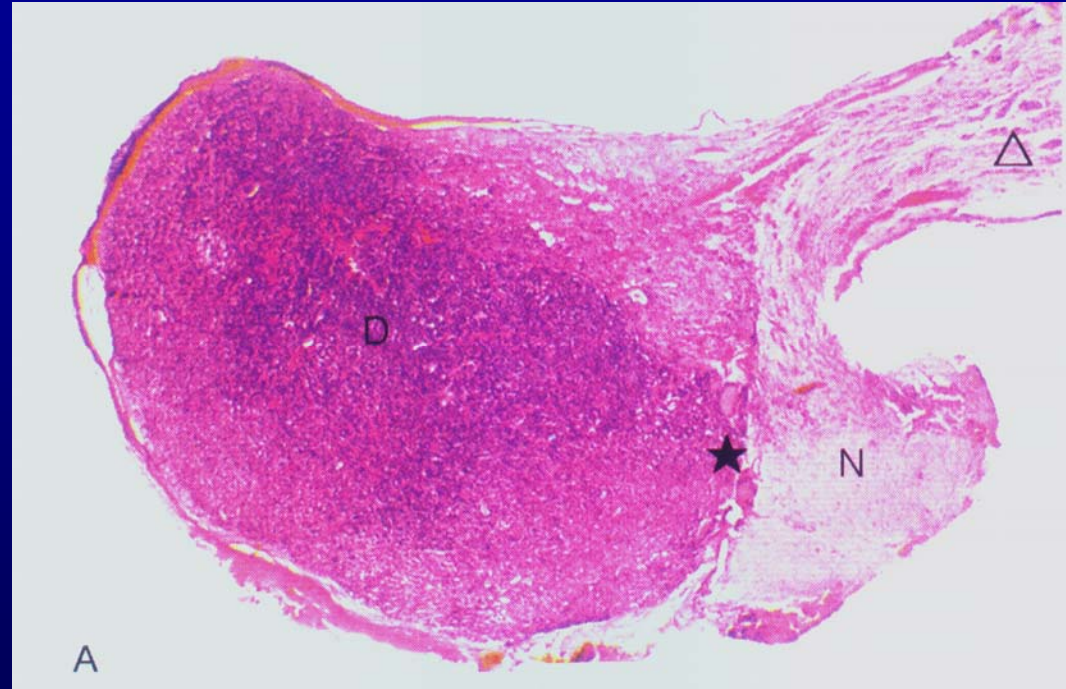
adenohypophysis

pars distalis

pars intermedia

pars tuberalis

neurohypophysis



1 adenohypophysis

1.1 pars distalis

(1) acidophilic cell

- 1) somatotroph : growth hormone , GH
- 2) mammotroph : prolactin , PRL

(2) basophilic cell

- 1) **thyrotroph**: thyroid stimulating hormone, TSH
- 2) **gonadotroph** :
follicle stimulating hormone ,FSH
luteinizing hormone, LH
interstitial cell stimulating hormone , ICSH

3) **corticotroph**

- adenocorticotrophic , ACTH
- lipotrophic hormone , LPH

(3) chromophobe cell

巨人症

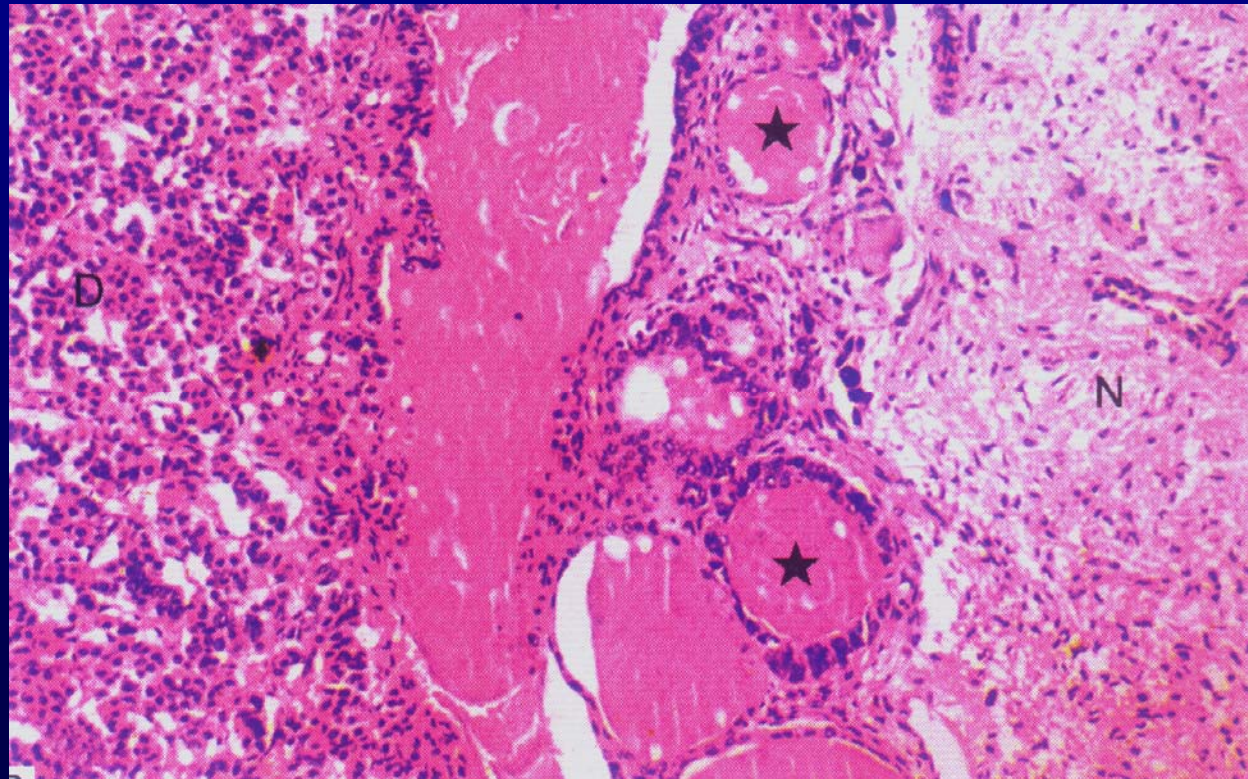


侏儒症

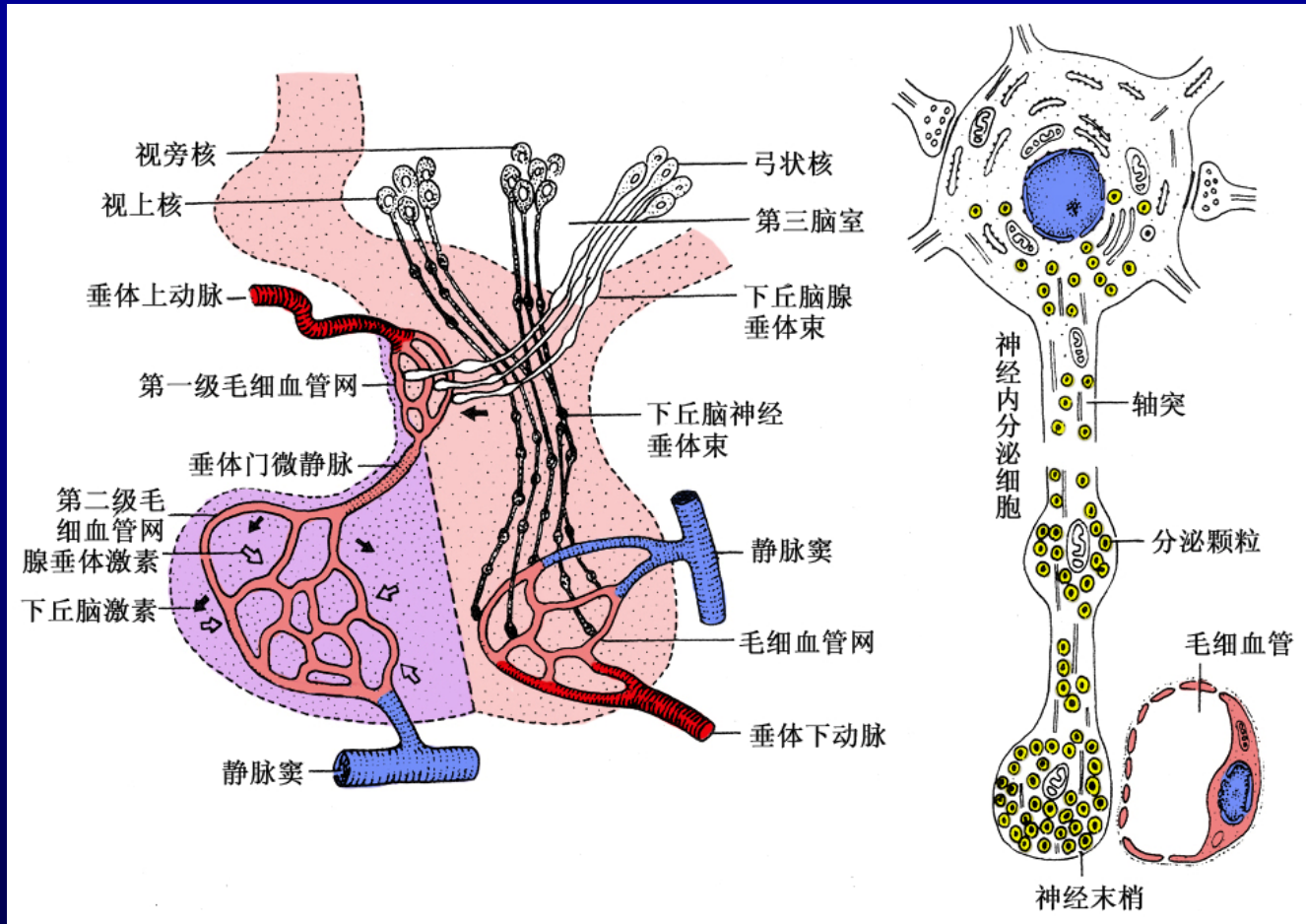
1.2 pars intermedia

follicles , chromophobe cells, basophilic cells,
producing melanocyte stimulating hormone,
MSH

1.3 pars tuberalis



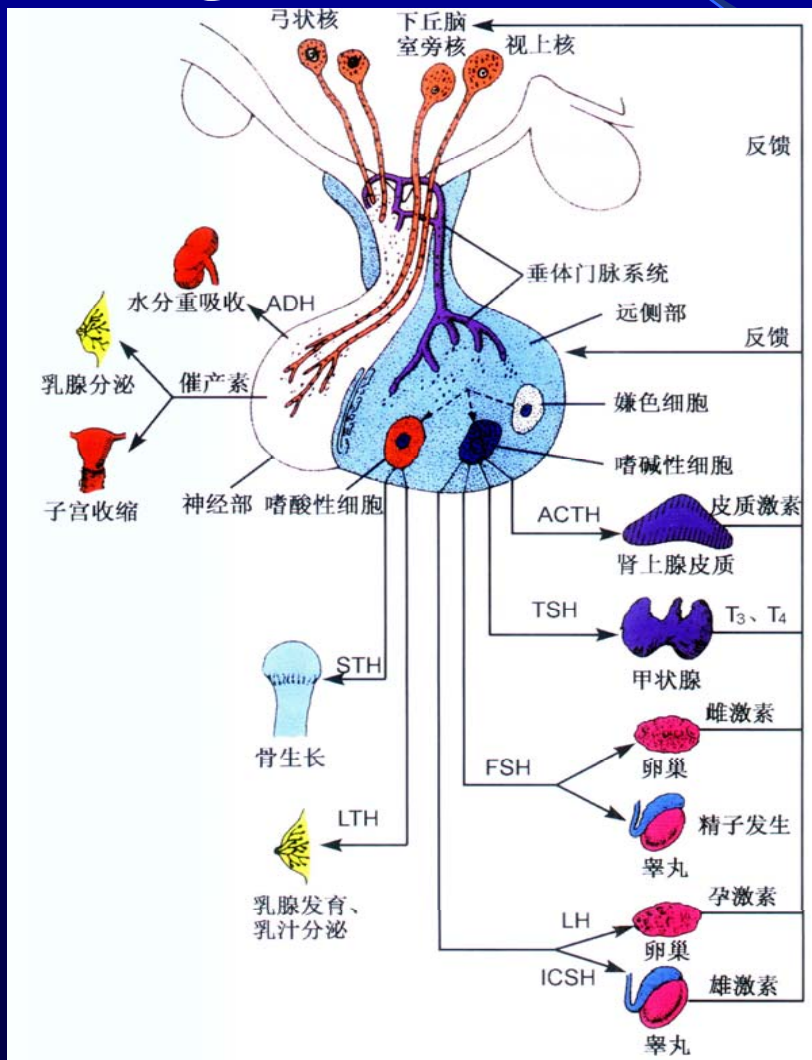
1.4 hypophyseal portal system



1.5 relationship of hypothalamus and adenohipophys

release hormone, RH

release inhibiting hormone, RIH



V pineal body

pinealocyte, glial cells and unmyelinated
nerve fibers

Function: to produce melatonin

VI amine precursor uptake and

Decarboxylation cell (APUD cell)

