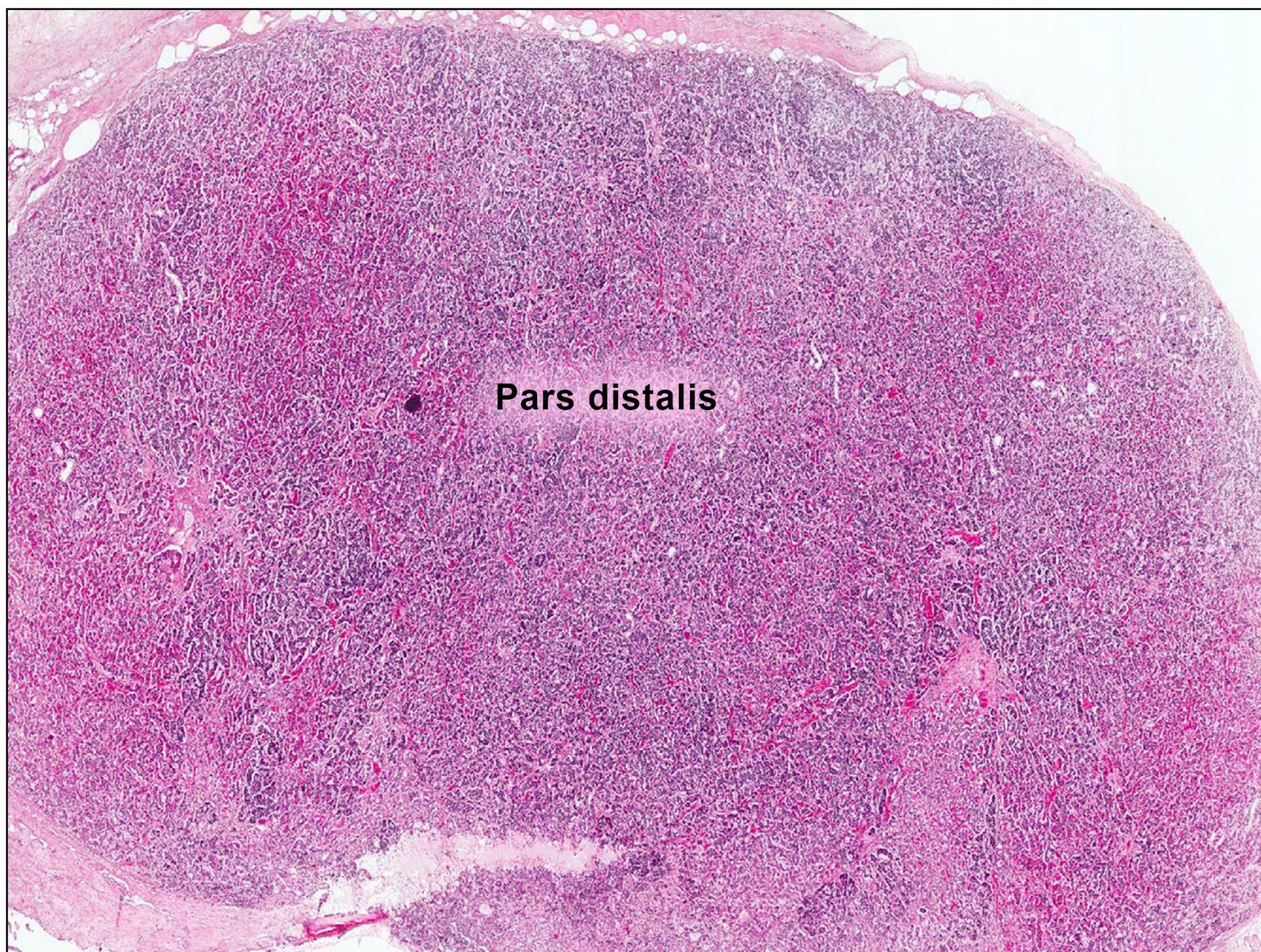
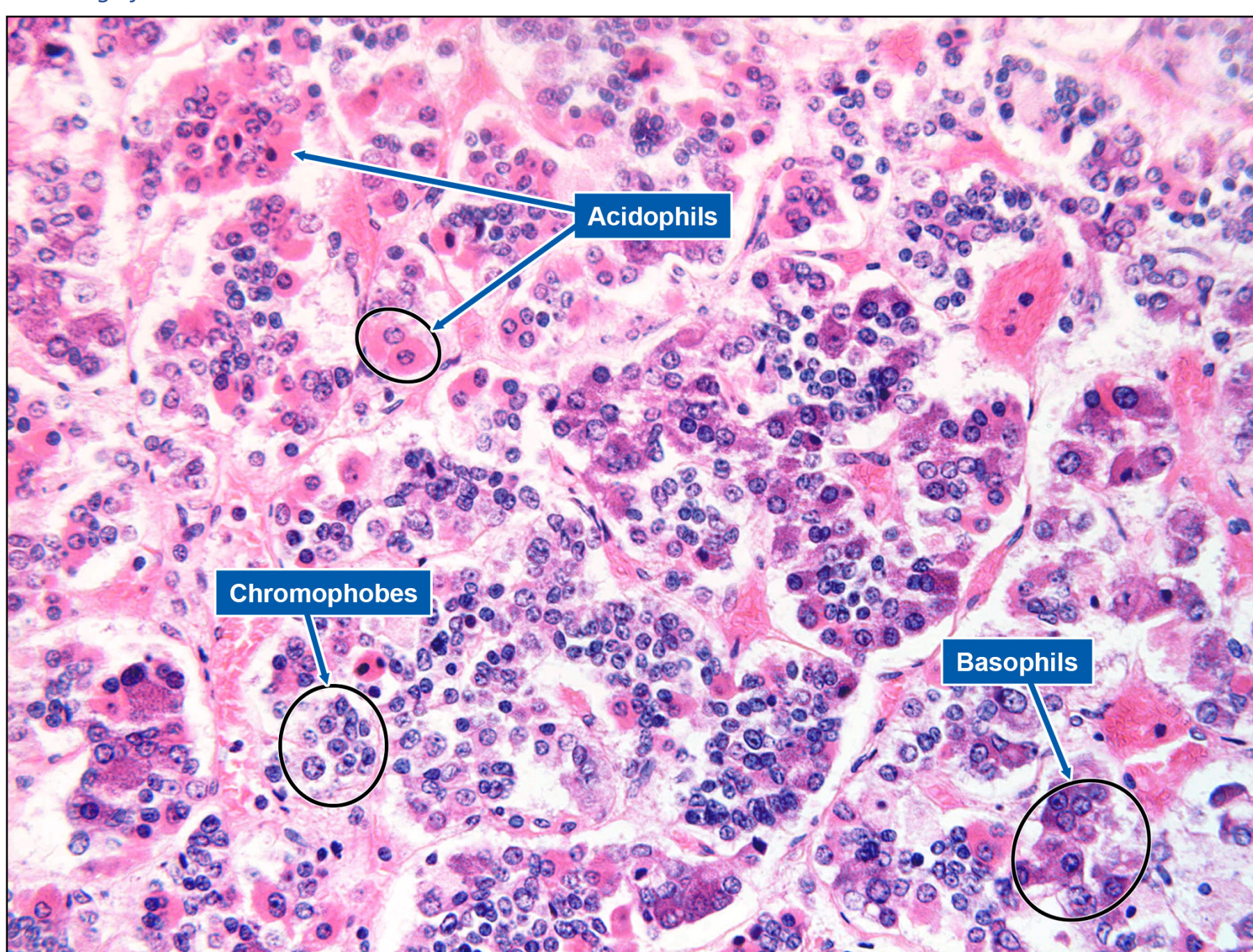


# PITUITARY GLAND (PARS DISTALIS)

Endocrine System



Low magnification



High magnification

- The anterior pituitary has 5 main cell types: Somatotrophs, Lactotrophs, Gonadotrophs, Thyrotropes, & Corticotropes.
- Somatotrophs: release growth hormone.
- Lactotrophs: release prolactin.
- Thyrotropes produce thyroid stimulating hormone (TSH).
- Gonadotrophs produce: Luteinizing hormone (LH) & Follicle stimulating hormone (FSH).
- Corticotropes produce: Adrenocorticotrophic hormone (ACTH).
- Cytoplasm of Basophil stain blue colour.
- Basophils contain glycoprotein hormones (TSH, LH, FSH, ACTH) and target adrenal cortex, gonads, and thyroid gland.
- Acidophils and Basophil have extensive microvasculature.
- Chromophobes stain poorly. They are degranulated acidophil or basophils.
- Somatotrophs are the most prevalent cells and thyrotropes being the least prevalent.
- Pituitary adenoma arising from somatotrophs may lead to acromegaly in adults or gigantism in infants.