PTA/OTA 106 Unit 1 / Lab 4

Endocrine and Cardiovascular

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Updated: Fall O8

Cardiovascular components of the Head and Neck

Major Arteries:

Superficial Temporal	Maxillary	Facial
Occipital	Internal Carotid	External Carotid
Vertebral	Common Carotid	Subclavian
Suprascapular artery	Brachiocephalic trunk	basilar

Circle of Willis (Cerebral arterial circle)

Major Veins:

Superior sagittal sinus	Transverse sinus	Sigmoid sinus
Temporal	Occipital, Facial	Maxillary
External Jugular	Internal jugular	Vertebral
Brachiocephalic		

Structure of the Skull related to blood vessels:

Superior sagittal sulcus	Transverse sulci	Sigmoid sulci
Jugular foramen	Jugular fossa	Carotid foramen

(Be sure you can identify left and right on all these structures)

Endocrine components of the Head and Neck

Endocrine glands and the hormones they produce:

Hypothalamus: (Hormone target the Pituitary gland)

(releasing Factors) Growth Hormone Releasing hormone, Thyrotropin Releasing Hormone, Gonadotropic Releasing Hormone, Prolactin releasing Hormone, Corticotropin Releasing Hormone

(inhibiting factors) Growth Hormone Inhibiting Hormone or Somatostatin, Prolactin Inhibiting Hormone, Dopamine

Posterior Pituitary or neurohypophysis: Releases two hormones produced by the Hypothamlus, ADH and Oxytocin

Anterior Pituitary Gland or Adenohypophysis:

(Somatotrophs) Human Growth Hormone "hGH,"
(Thyrotrophs) Thyroid-Stimulating Hormone "TSH,"
(Gonadotrophs) Follicle-Stimulating Hormone "FSH," Luteinizing Hormone "LH,"
(Lactotrophs) Prolactin "PRL,"

(Corticotrophs) Adrenocorticotrophic Hormone “ACTH,” Melanocyte Stimulating Hormone “MSH”

Thyroid Gland:

(Follicular cells) T_3 and T_4,
(Parafollicular cells) Calcitonin

Parathyroid Gland:

(Principal cells) Parathyroid Hormone “PTH”

Pineal Gland:

(Pineal cells) Serotonin and Melatonin