

Name _____

Cardiovascular & Lymphatic Variation

(Take-home portion of Human Anatomy **Lecture** Exam II – 10 Points)

Complete this exercise by visiting the on-line text *Illustrated Encyclopedia of Human Anatomic Variation* at <http://www.anatomyatlases.org/AnatomicVariants/AnatomyHP.shtml>.

Cardiovascular: Heart

- From the home page, scroll down to “Cardiovascular System”, select “Cardiovascular system listed alphabetically”, then select “Heart”

_____ 1. How frequently is incomplete closure of the foramen ovale noted?

- For a different perspective on the foramen ovale, visit http://my.clevelandclinic.org/disorders/patent_foramen_ovale_pfo/hic_Patent_Foramen_Ovale_PFO.aspx (you may need to search the site for PFO rather than cut&paste this link)

_____ 2. According to the Cleveland Clinic, how frequently is incomplete closure of the foramen ovale (called a Patent Foramen Ovale) noted?

_____ 3. In what percentage is closure required?

Cardiovascular: Vessels

4. Review your text, Fig. 20.18 and read the Clinical Application entitled Patent Ductus Arteriosus (PDA).

- Return to the Anatomic Variants Heart page and scroll down to the extensive chart of recorded anomalies. Note how long many people are able to live with something classified as “abnormal”. According to this chart (#17), how many people out of 1000 exhibited a PDA?

_____ .
_____ What was the maximum life span recorded with this condition?

- Return to the alphabetical listing, select “A” under Arteries, then select “Aorta”, then “Abdominal”

_____ 5. My lecture states that the aorta typically bifurcates ~L4. How often is that true?

- Return to the alphabetical listing. Select “I” under Veins, then select “inferior vena cava”.

_____ 6. How frequently is the inferior vena cava doubled?

Lymphatic System (return to the alphabetical listing)

_____ 7. What percentage of people actually have a cisterna chyli?

True or False?

_____ 8. It is rare to find a single right lymphatic duct that enters directly into the junction of the internal jugular and subclavian veins.

_____ 9. The thoracic duct has been found draining into the azygos vein and the inferior vena cava.

_____ 10. The thoracic duct has been found terminating in the right subclavian vein rather than the left.