



## Cardiology Lecture Notes

### Cardiac Structure/Function

- Pattern of blood flow through the heart:

\_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_

- Inotropy:

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- Cardiac Output = \_\_\_\_\_ x \_\_\_\_\_

- Diastole:

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### Cardiac Electrical Activity

- Cardiac electrical pathway:

\_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_

- Cardiac pacemaker = \_\_\_\_\_

- P wave = \_\_\_\_\_

- QRS Complex = \_\_\_\_\_

- We typically use \_\_\_\_\_ for ECG tracing

- Threshold potential is set by \_\_\_\_\_

- Phase 0 of the cardiac action potential (rapid depolarization) is characterized by an \_\_\_\_\_ of \_\_\_\_\_

- Characteristics of a sinus rhythm:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

- Treatment for VTach = \_\_\_\_\_

- Treatment for AIVR = \_\_\_\_\_

- Treatment for VFib = \_\_\_\_\_





### **Cardiac Disease**

- The most common cardiomyopathy of CATS = \_\_\_\_\_
- DCM often progresses to cause \_\_\_\_\_
- \_\_\_\_\_ can be a sign of CHF in cats
- MMVD often progresses to \_\_\_\_\_
- \_\_\_\_\_ is a result of HWD
- Two symptoms of left-sided heart failure:
  - \_\_\_\_\_
  - \_\_\_\_\_
- Heart disease leads to an increase in LA pressure and \_\_\_\_\_
- The system that is triggered by decreased renal perfusion is \_\_\_\_\_
  - This system also increases \_\_\_\_\_
- An LA:Ao ratio of \_\_\_\_\_ is consistent with chronic LA overload
- B-lines represent \_\_\_\_\_ lung
  
- Examples of Na channel blockers:
  - \_\_\_\_\_
  - \_\_\_\_\_
- The primary neurotransmitter of the SNS = \_\_\_\_\_
- An example of a common PDE III inhibitor = \_\_\_\_\_
- Remin release is stimulated by:
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- Mechanism of action of Loop diuretics = \_\_\_\_\_



### Holiday Toxins Lecture Notes

- What does activated charcoal do?
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- What is the toxic substance in raw bread dough? \_\_\_\_\_
- In regards to alcohol toxicity, if severe metabolic acidosis is present, this treatment may be considered
  - \_\_\_\_\_
- What is the effect of THC on the nervous system?
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- How is a patient treated for THC toxicity if they are not vomiting?
  - \_\_\_\_\_

Brewed Coffee	_____ mg caffeine per serving	_____ mg caffeine per 100g
Brewed Tea	_____ mg caffeine per serving	_____ mg caffeine per 100g
Reduced sugar cola	_____ mg caffeine per serving	_____ mg caffeine per 100g
Milk chocolate coated raisins	_____ mg caffeine per serving	_____ mg caffeine per 100g
Cacao beans	_____ mg/g theobromine	
Baking chocolate	_____ mg/g theobromine	
Dark chocolate	_____ mg/g theobromine	
Cocoa powder	_____ mg/g theobromine	

- The toxic substances in chocolate are
  - \_\_\_\_\_
  - \_\_\_\_\_
- Why are UCaths placed in chocolate toxicosis cases?
  - \_\_\_\_\_





- What is the toxic substance in grapes?
  - \_\_\_\_\_
- Are there contraindications to induced emesis for grape ingestion? \_\_\_\_\_
- Clinical symptoms of mistletoe/holly/poinsettia ingestion?
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- Symptoms of thiosulfate toxicity (garlic, onions)
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- To what family do onions belong to? \_\_\_\_\_
- Which toxin can cause rapid insulin release and liver failure in dogs?
  - \_\_\_\_\_
- Is emesis a treatment option for xylitol ingestion? \_\_\_\_\_
- What is the toxic compound found in avocados?
  - \_\_\_\_\_
- What toxin causes fatal kidney failure in cats?
  - \_\_\_\_\_
- Symptoms of Pine toxicity
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_





**Extra notes**

