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HOLTER VS EVENT MONITORING

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There are two important devices that can be used to identify cardiac electrical events that may be associated with the development of clinical signs. These include a 24 hour ambulatory electrocardiogram (Holter monitor) and an Event Monitor.

HOLTER MONITOR

A Holter monitor is a device that records 24–48 hours of continuous cardiac electrical activity.

A Holter monitor answers the following questions:
1. Is there an arrhythmia present today?
2. What is the arrhythmia?
3. Has a drug, or time changed the arrhythmia?

1. Is there an arrhythmia present today?

Holters should provide you with a complete quantification of the 24 hours of electrical activity (in a dog this may be between 90,000 -100,000 hear beats per day).

2. What is the arrhythmia?

Through careful evaluation of the results should be able to detect the number of pauses, premature beats, AV block, etc.

3. Has a drug, or time changed the arrhythmia?

Evaluation of pre and post-therapy Holters can be very revealing. However, it should be noted that many animals have significant day to day variability in arrhythmia. For example a dog with 500 VPCs/ day can have an 85% change in VPC number from one day to the next.

However, may not always provide information on exact cause of syncope unless episode happens while animal is wearing monitor.

EVENT MONITOR

Event monitor is a device that an animal can wear for an extended monitoring period (5-7 days), however, it only saves approximately 120 seconds of electrical activity. If a syncopal episode occurs, the owner must activate a button on the machine which will save the current cardiac electrical activity (120 seconds) is recorded as well as the previous 45 seconds. An event monitor answers the question:

1. Is there an electrical reason for the episode of syncope?

However, it does not give you a quantification of the daily electrical activity. Additionally if the owner is not there to activate the monitor during the episode, the electrical activity associated with the episode will not be saved.