Mayo Clinic
Department of Nursing
Education and Professional Development Division

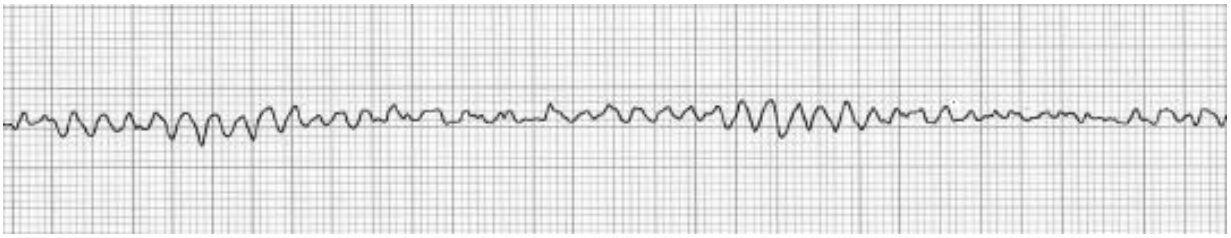
BASIC ECG INTERPRETATION – RST
WORKSHEET #5

Instructions:
Calculate the Atrial Rate*, Ventricular Rate*, PR interval, QRS width, and Interpretation for each strip.
**Calculate the Atrial and Ventricular Rate using either the 1500 method, countdown method or 6 second method*

1.

Rhythm: Atrial: Regular Ventricular: Regular
Rate: Atrial 40 Ventricular 80
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.20
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? < 0.12 on sinus beats, >0.12 on ectopic
Is it normal or widened? Normal on sinus, Wide on ectopic Is it constant? No
Interpretation: Sinus Rhythm with Bigeminal Uniform PVC's

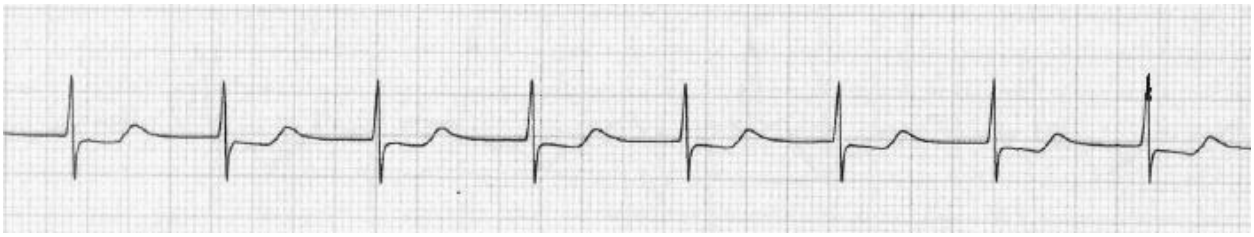
2.



Rhythm: Atrial UTA Ventricular UTA
Rate: Atrial UTA Ventricular UTA
Is there a P wave for every QRS complex? UTA
Is there a QRS complex for every P wave? UTA
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? UTA
Is it normal or widened? UTA Is it constant? UTA
Interpretation: Ventricular Fibrillation - Lethal

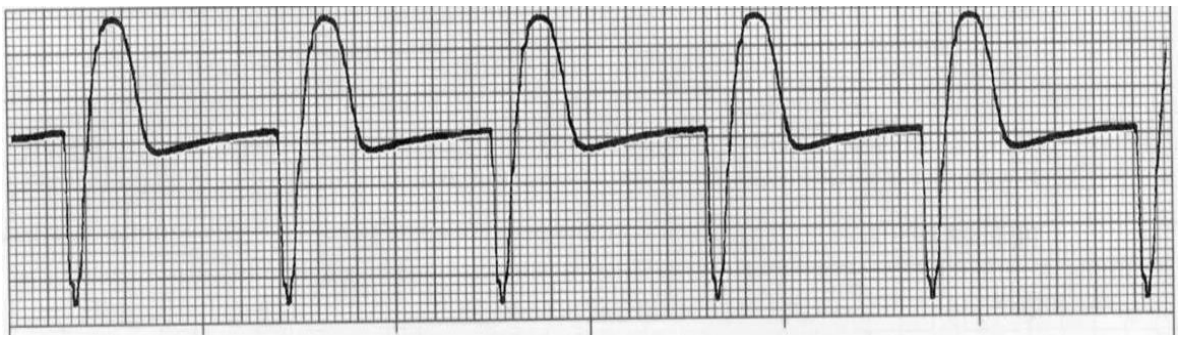
Document Owner: Amanda Moscatelli MAN, RN
Revised: 1/3/2022

3.



Rhythm: Atrial: N/A Ventricular: Regular
Rate: Atrial UTA Ventricular 80
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? N/A
What is the PR Interval? N/A
Is it shortened, normal or prolonged? N/A Is it constant?
What is the QRS width? 0.08
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Accelerated Junctional Rhythm

4.

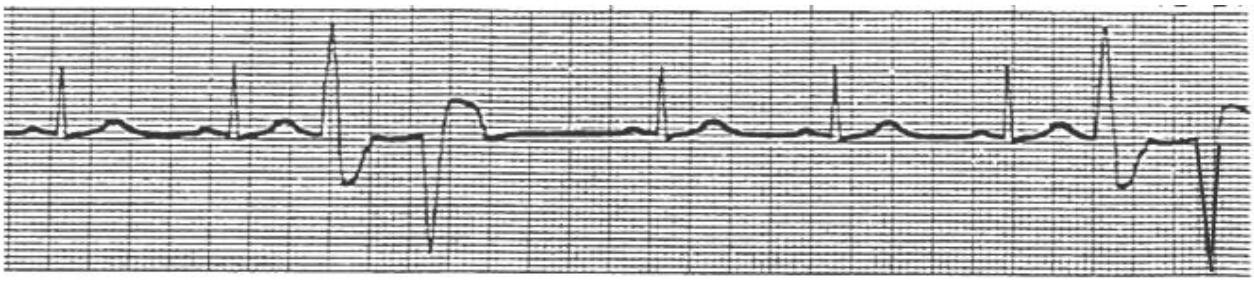


Rhythm: Atrial UTA Ventricular Regular
Rate: Atrial UTA Ventricular 56
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? N/A
What is the PR Interval? UTA
Is it shortened, normal or prolonged? N/A Is it constant?
What is the QRS width? 0.14
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Accelerated Idioventricular

5.

Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 60 Ventricular 60
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.32
Is it shortened, normal or prolonged? Prolonged Is it constant? Yes
What is the QRS width? 0.10
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Sinus Rhythm with First Degree AV Block

6.



Rhythm: Atrial Irregular (regular w/o PVCs) Ventricular Irregular
Rate: Atrial 68 Ventricular 90
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.16
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? < 0.12 on sinus beats, >0.12 on ectopic
Is it normal or widened? Normal on sinus, Wide on ectopic Is it constant? No
Interpretation: Sinus Rhythm with multiform couplet PVC's

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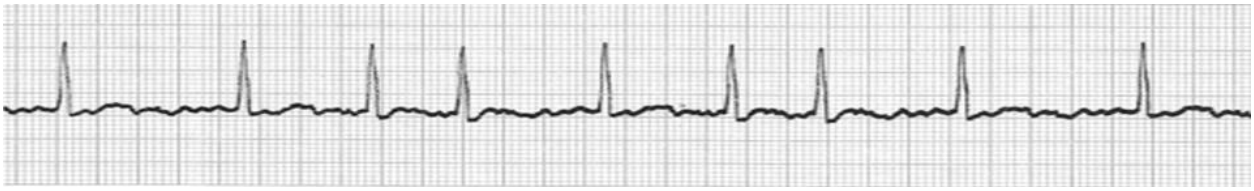
Revised: 1/3/2022

7.

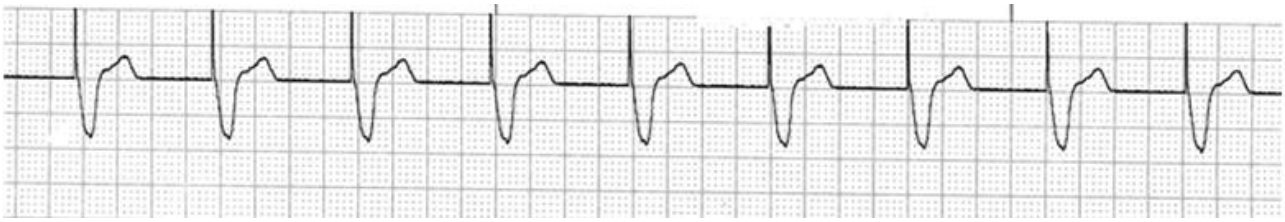


Rhythm: Atrial Irregular Ventricular Irregular
Rate: Atrial UTA Ventricular 90
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? N/A
What is the PR Interval? N/A
Is it shortened, normal or prolonged? N/A Is it constant?
What is the QRS width? 0.08
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Atrial Fibrillation with controlled ventricular response

8.

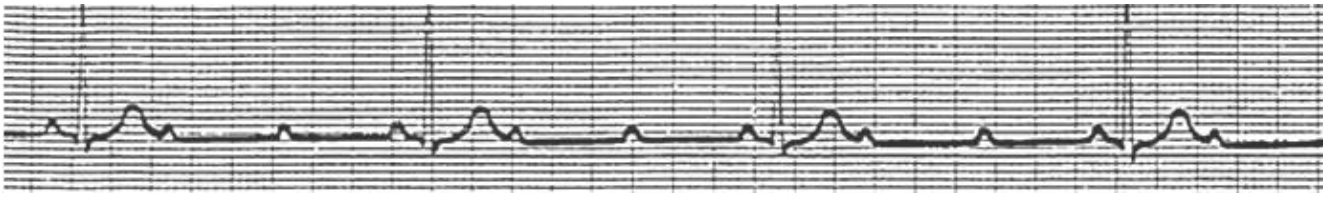
Rhythm: Atrial Regular, except for ectopic beats Ventricular Regular, except for ectopic beats
Rate: Atrial 80 Ventricular 80
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.16
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? 0.10
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Sinus Rhythm with 1 PAC

9.



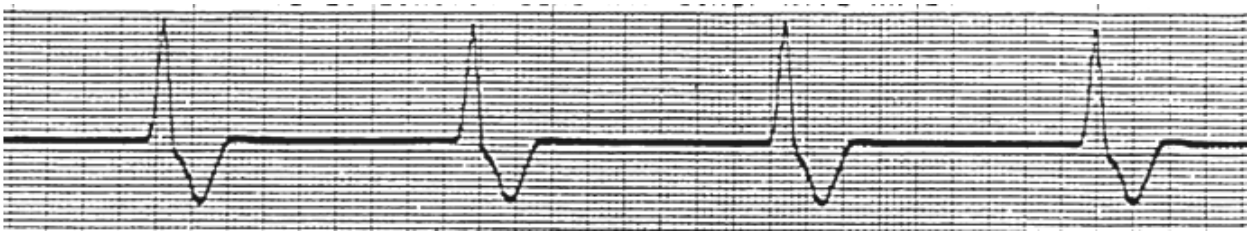
Rhythm: Atrial UTA Ventricular Regular
Rate: Atrial UTA Ventricular 75
Is there a P wave for every QRS complex? No Is there a QRS complex for every P wave? UTA
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? 0.16
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Ventricular Pacing with 1:1 capture

10.



Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 110 Ventricular 40
Is there a P wave for every QRS complex? Yes Is there a QRS complex for every P wave? No
What is the PR Interval? 0.16
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? 0.08
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Second Degree AV Block Type II

11.

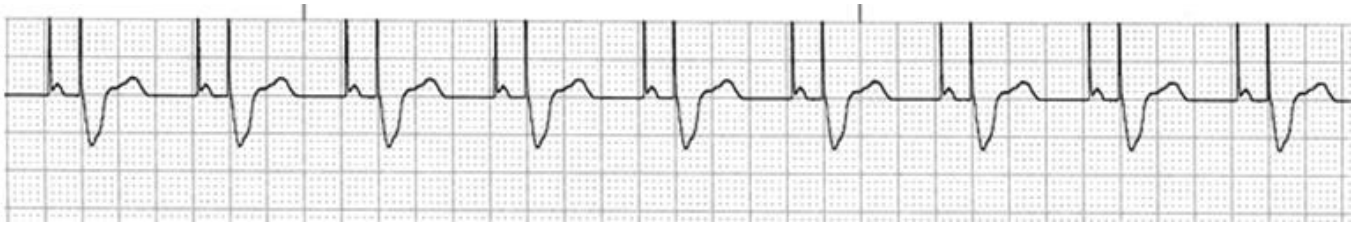


Rhythm: Atrial UTA Ventricular Regular
Rate: Atrial UTA Ventricular 35
Is there a P wave for every QRS complex? No Is there a QRS complex for every P wave? UTA
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? 0.16
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Idioventricular Rhythm

12.

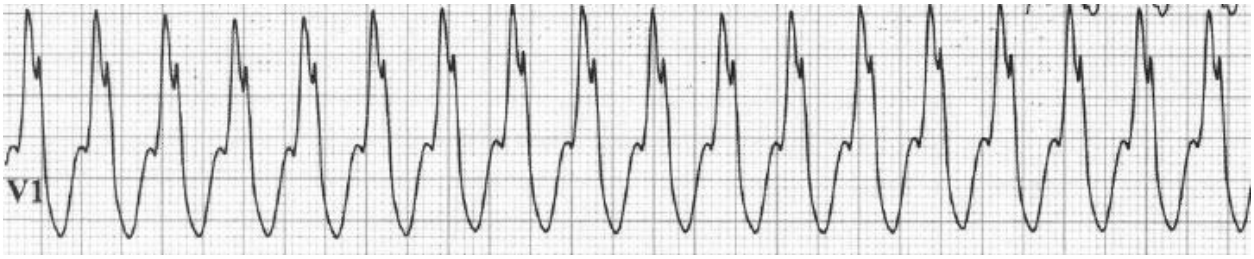
Rhythm: Atrial Irregular Ventricular Irregular
Rate: Atrial 250 Ventricular 120
Is there a P wave for every QRS complex? No, F waves
Is there a QRS complex for every P wave? NA
What is the PR Interval? NA
Is it shortened, normal or prolonged? NA Is it constant? NA
What is the QRS width? 0.10
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Atrial Flutter with variable conduction

13.



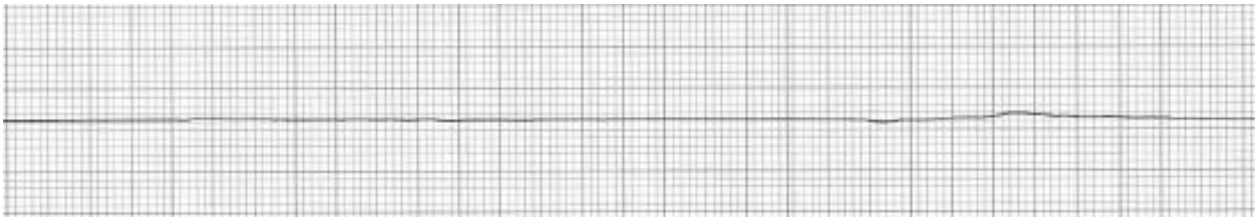
Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 75 Ventricular 75
Is there a P wave for every QRS complex? Yes Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.18
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? 0.16
Is it normal or widened? Widened Is it constant? Yes
Interpretation: AV Pacing with 1:1 capture

14.



Rhythm: Atrial UTA Ventricular Regular
Rate: Atrial UTA Ventricular 180
Is there a P wave for every QRS complex? No Is there a QRS complex for every P wave? No
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? 0.20
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Monomorphic Ventricular Tachycardia – Lethal

15.

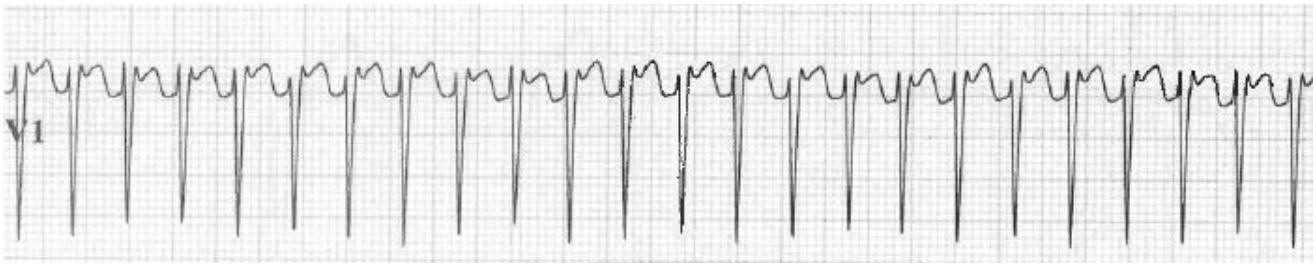


Rhythm: Atrial UTA Ventricular UTA
Rate: Atrial UTA Ventricular UTA
Is there a P wave for every QRS complex? UTA
Is there a QRS complex for every P wave? UTA
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? UTA
Is it normal or widened? UTA Is it constant? UTA
Interpretation: Asystole - Lethal

16.

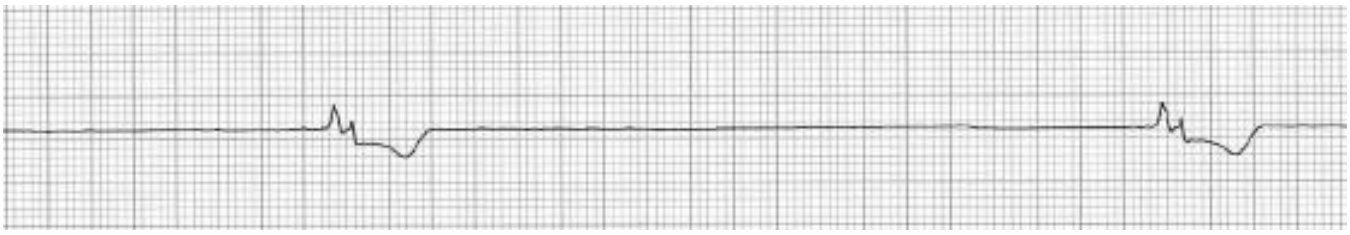
Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 75 Ventricular 75-168
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? Yes, when visible
What is the PR Interval? 0.32
Is it shortened, normal or prolonged? Prolonged Is it constant? Yes
What is the QRS width? 0.10-0.24
Is it normal or widened? Normal then Widened Is it constant? Yes
Interpretation: Sinus Rhythm with First Degree AV Block into Monomorphic Ventricular Tachycardia – Lethal

17.



Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial UTA Ventricular 240
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? NA
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? 0.08
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Supraventricular Tachycardia

18.

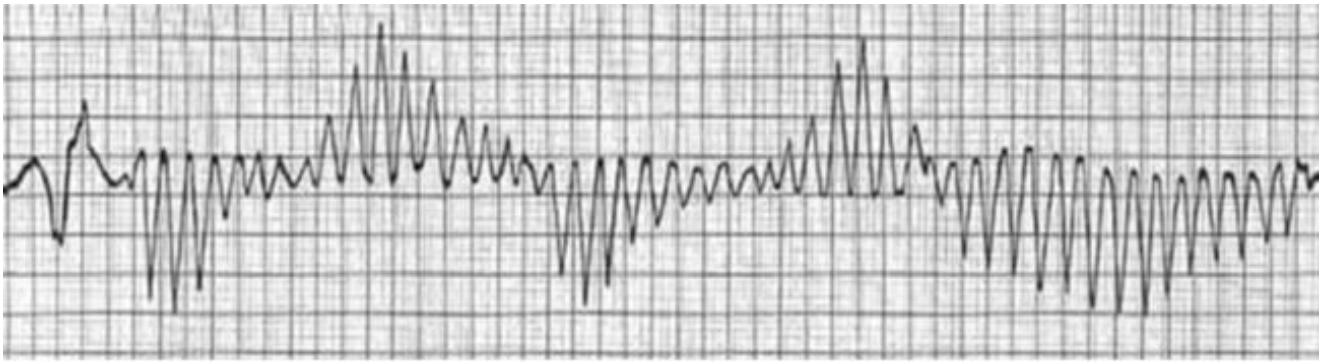


Rhythm: Atrial UTA Ventricular Regular
Rate: Atrial UTA Ventricular 15
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? No
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? 0.16
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Agonal Rhythm – Lethal

19.

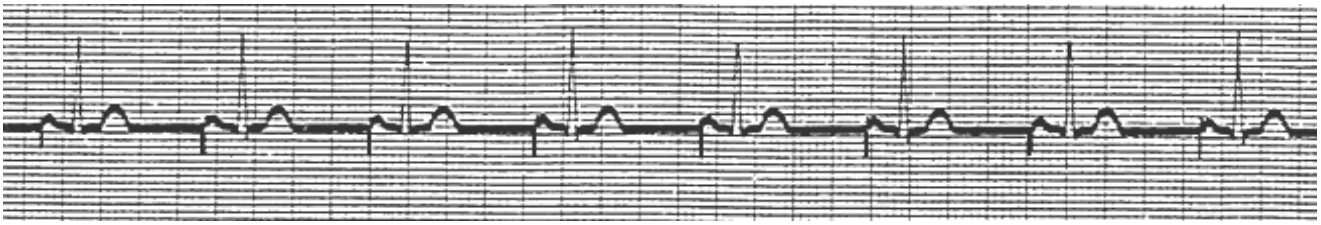
Rhythm: Atrial Regular, with ectopic beats Ventricular Regular, with ectopic beats
Rate: Atrial 65 Ventricular 70
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.16
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? < 0.12 on sinus beats, >0.12 on ectopic
Is it normal or widened? Normal on sinus, Wide on ectopic Is it constant? No
Interpretation: Sinus Rhythm with one uniform couplet PVCs

20.



Rhythm: Atrial NA Ventricular NA
Rate: Atrial NA Ventricular NA
Is there a P wave for every QRS complex? NA
Is there a QRS complex for every P wave? NA
What is the PR Interval? NA
Is it shortened, normal or prolonged? NA Is it constant? NA
What is the QRS width? 0.20
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Polymorphic Ventricular Tachycardia - Lethal

21.

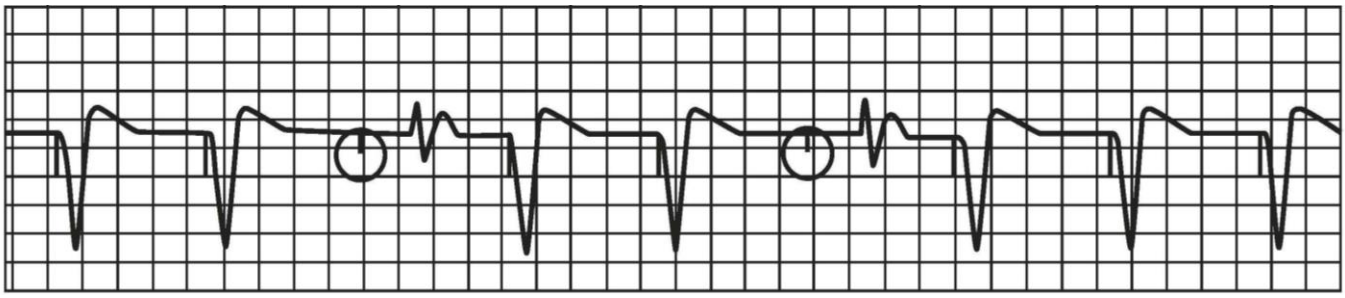


Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 72 Ventricular 72
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.18
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? 0.06
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Atrial Pacing with 1:1 capture

22.

Rhythm: Atrial Regular Ventricular Irregular
Rate: Atrial 80 Ventricular 50
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? No
What is the PR Interval? Variable
Is it shortened, normal or prolonged? NA Is it constant? No
What is the QRS width? 0.08
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Second Degree AV Block Type I (Wenckebach)

23.



Rhythm: Atrial UTA Ventricular Irregular
Rate: Atrial UTA Ventricular 70
Is there a P wave for every QRS complex? No
Is there a QRS complex for every P wave? UTA
What is the PR Interval? UTA
Is it shortened, normal or prolonged? UTA Is it constant? UTA
What is the QRS width? 0.16-0.18
Is it normal or widened? Widened Is it constant? Overall no, but the paced beats are
Interpretation: V Paced with 2 beats failure to capture

24.

Rhythm: Atrial Irregular Ventricular Irregular
Rate: Atrial 80 Ventricular 80
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? Yes
What is the PR Interval? 0.12
Is it shortened, normal or prolonged? Normal Is it constant? Yes
What is the QRS width? 0.10
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Sinus Dysrhythmia

25.

Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 79 Ventricular 30
Is there a P wave for every QRS complex? More Ps than QRS
Is there a QRS complex for every P wave? No
What is the PR Interval? Variable
Is it shortened, normal or prolonged? UTA Is it constant? No
What is the QRS width? 0.16
Is it normal or widened? Widened Is it constant? Yes
Interpretation: Third Degree AV Block

26.

Rhythm: Atrial Regular Ventricular Irregular
Rate: Atrial 100 Ventricular NA
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? No
What is the PR Interval? 0.22 on the first beat
Is it shortened, normal or prolonged? Prolonged Is it constant? Yes
What is the QRS width? 0.10 on the first beat
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Ventricular Standstill - Lethal

27.

Rhythm: Atrial Regular Ventricular Regular
Rate: Atrial 120 Ventricular 120
Is there a P wave for every QRS complex? Yes
Is there a QRS complex for every P wave? Yes
What is the PR Interval? NA – P wave is retrograde
Is it shortened, normal or prolonged? Retrograd Is it constant? Yes
What is the QRS width? 0.08
Is it normal or widened? Normal Is it constant? Yes
Interpretation: Junctional Tachycardia