



(Affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai)

## DEPARTMENT OF CARDIAC TECHNOLOGY

# PUZZLES FOR THE SUBJECT OF ADVANCED ECG, TMT AND 24 HRS AMBULATORY HOLTER AND BP RECORDINGS

1. Which electrolyte imbalance is most commonly associated with peaked 1 waves on an ECG?
a) Hypokalemia
b) Hyperkalemia
c) Hypocalcemia
d) Hypermagnesemia
2. What ECG finding is typically seen in severe hypokalemia?
a) Shortened QT interval
b) Prominent U waves
c) Widened QRS complex
d) ST-segment elevation
3. Which metabolic condition can cause ST-segment depression and T-wave inversion on an ECG?

- a) Hyperthyroidism
- b) Hypoglycemia
- c) Hypercalcemia
- d) Metabolic alkalosis





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- 4. What is a characteristic ECG change associated with hypercalcemia?a) Prolonged QT intervalb) Shortened QT interval
  - c) Widened QRS complex
  - d) Flattened T waves
- 5. Which of the following ECG abnormalities is most likely caused by hypomagnesemia?
- a) Prolonged PR interval
- b) Torsades de pointes
- c) ST-segment elevation
- d) Narrowed QRS complex
- 6. In the context of metabolic acidosis, which ECG change is commonly observed?
- a) Peaked T waves
- b) Prolonged QRS duration
- c) Shortened PR interval





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d) Flattened P waves
7. Which electrolyte abnormality can mimic myocardial ischemia on an ECG?
a) Hyperkalemia
b) Hypokalemia
c) Hypernatremia
d) Hypocalcemia
8. What is a common ECG finding in patients with severe hyperkalemia?

- a) Sinus bradycardia
- b) Widened QRS complex
- c) Shortened QT interval
- d) Prominent P waves
- 9. Which condition is least likely to cause QT prolongation on an ECG?
- a) Hypokalemia
- b) Hypocalcemia





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- c) Hypomagnesemia
- d) Hypernatremia
- 10. What ECG change is often associated with diabetic ketoacidosis?
  - a) ST-segment elevation
  - b) Peaked T waves due to hyperkalemia
  - c) Shortened QT interval
  - d) Absent U waves