QUIZ 17th October 2018 (answers below)

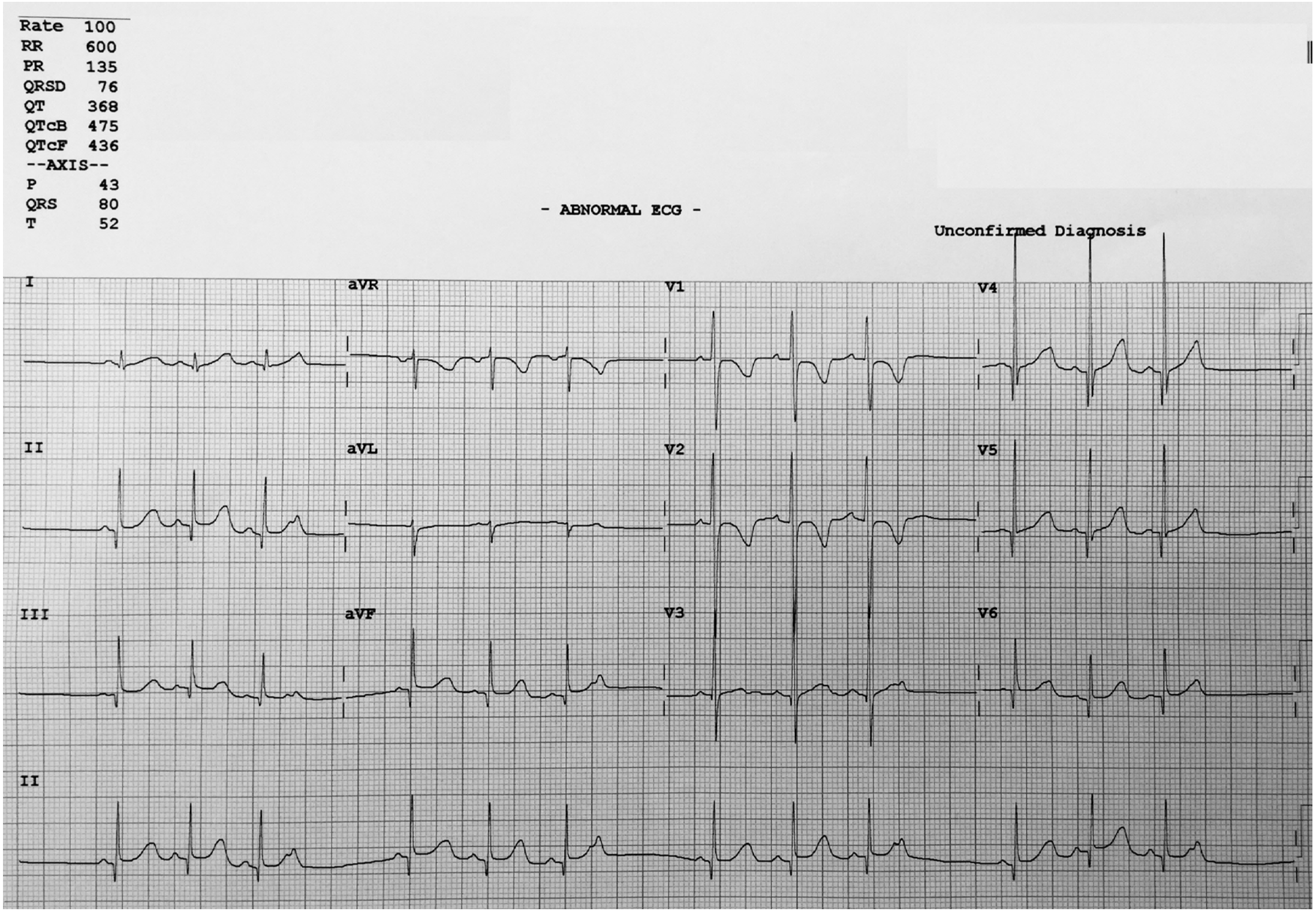
1. **What are the Sgarbossa criteria for myocardial infarction in LBBB?**

2. **What are ECG findings in posterior AMI?**

3. **How do you obtain posterior leads on an ECG?**

4. **What is acamprosate?**

5. **Describe and interpret the following ECG.**


Rate 100
RR 600
PR 135
QRSD 76
QT 368
QTcB 475
QTcF 436
--AXIS--
P 43
QRS 80
T 52
- ABNORMAL ECG -
Unconfirmed Diagnosis
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
II

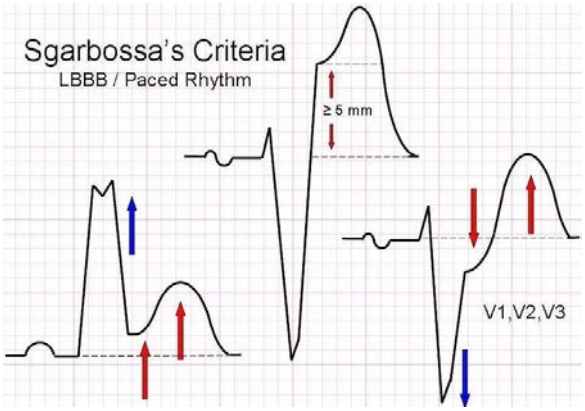
QUIZ answers 17th October 2018

1. **What are the Sgarbossa criteria for myocardial infarction in LBBB?**

Published in 1996, three Sgarbossa criteria were described:

1. *ST elevation ≥1 mm in a lead with a positive QRS complex (ie: concordance)*
   5 points
2. *Concordant ST depression ≥1 mm in lead V1, V2, or V3*
   3 points
3. *ST elevation ≥5 mm in a lead with a negative (discordant) QRS complex*
   2 points

≥3 points = 90% specificity of STEMI with sensitivity of 36%



Sgarbossa et al Electrocardiographic Diagnosis of Evolving Acute Myocardial Infarction in the Presence of Left Bundle-Branch Block in NEJM **334** (8): 481–487.

2. **What are ECG findings in posterior AMI?**

V1 – V3

Reciprocal changes of the posterior wall of the heart (dark side of the moon)

- *ST segment depression*
- *Prominent R wave*
- *R/S ratio >1 in V2*
- *Prominent upright T wave*

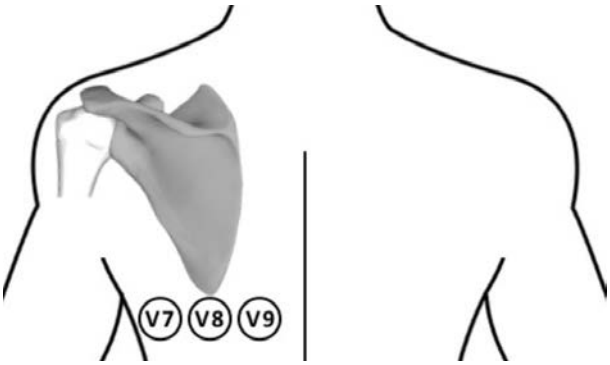
Posterior leads V7 – V9

ST segment elevation of only >0.5mm needed for diagnosis

May be coexisting inferior and/or lateral MI

3. How do you obtain posterior leads on an ECG?

Lead V7 *At the level of V6 but on the posterior axillary line*
Lead V8 *On the left side of the back, over the tip of the scapula*
Lead V9 *At the same level as V8, halfway between V8 and paraspinal muscles*



LITFL 2018

4. What is acamprosate?

Trade name "Campral", acamprosate is a structural analogue of GABA used in treating alcohol dependence. It is not effective in acute withdrawal, but does reduce the long term symptoms of anxiety, irritability, insomnia and cravings. There is evidence that abstinence from alcohol was significantly higher in patients taking acamprosate. There is also evidence that it protects neurons from damage and death caused by the effects of alcohol withdrawal-associated neurotoxicity.

Acamprosate is well tolerated. There may be transient diarrhoea. There is no abuse potential and does not interact with other drugs or alcohol and can be used in liver impairment. It is cleared renally, so dose may need to be reduced in renal failure.

Recommended dose is 666mg tds in >60kg. For those <60mg it is 666mg mane, 333mg midi and 333mg nocte. The tds dosing may make compliance difficult.

5. Describe and interpret the following ECG.

Rate *100/min*
Regularly irregular

P waves *Normal in size and morphology*
Every 4th P wave is a premature atrial complex not conducted to ventricle as AV node must still be refractory
These PACs do not enter the SA node as the rhythm is not reset
The interval beat initiated by the SA node meets refractory atria

PR interval *0.11 – 0.12 sec*

QRS *Narrow complexes*
Axis normal (80 degrees)
Narrow but deep q waves II, III, aVF and V4-6
Large R waves in precordial leads with counterclockwise rotation

S-T *Isoelectric*

T waves *Inverted V1 –V2*

Q-T *Upper limit of normal*

➔ *Non conducted regular premature atrial complexes*

Other changes

- *Rate 100/min*
- *Slightly short PR*
- *Normal rightward axis*
- *Narrow deep Q waves*
- *Large R waves in precordial leads*
- *T wave inversion V1-2*

➔ *All consistent with the ECG being from an 8 year old*