QUIZ 13th Sept 2017 (answers below)

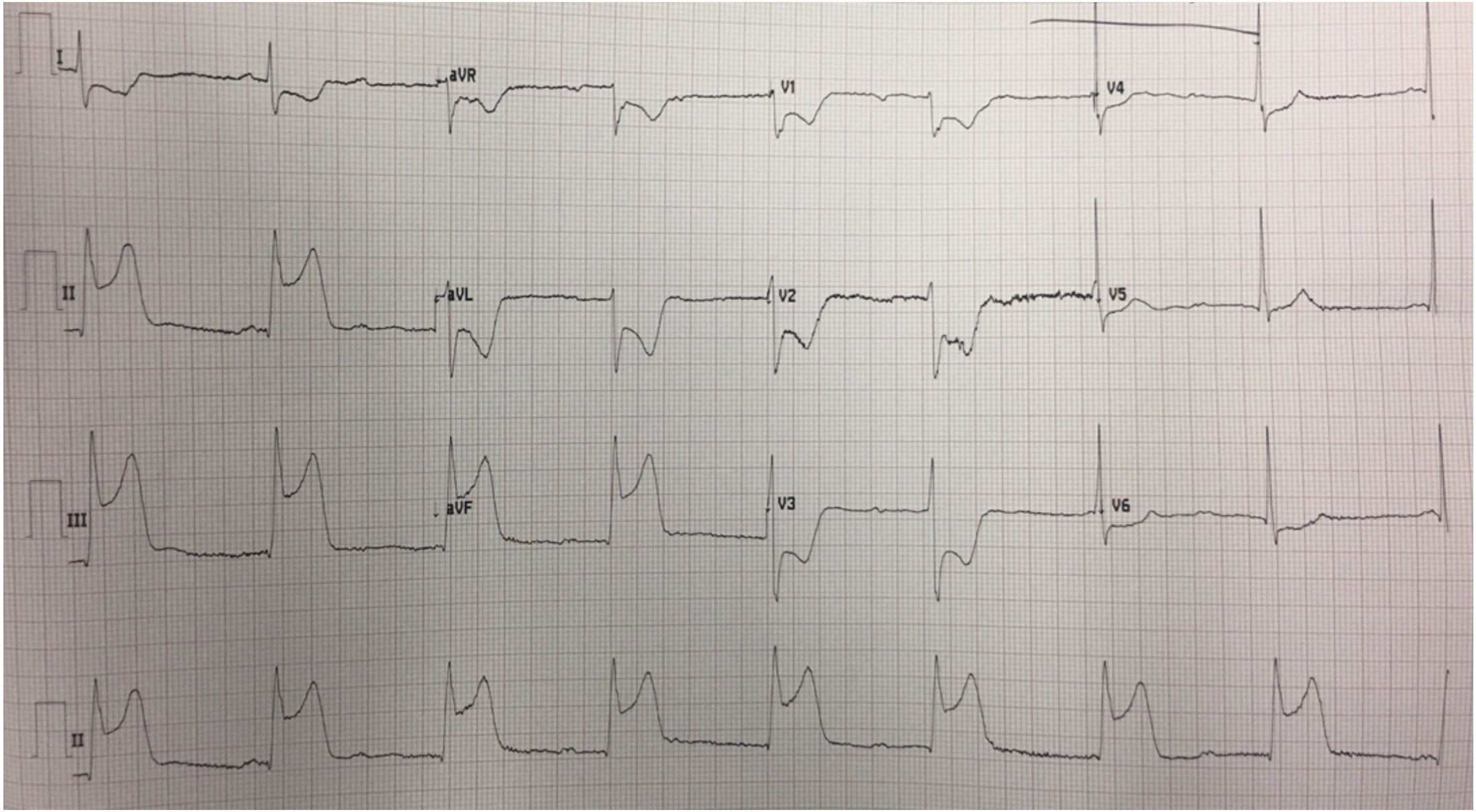
1. **When would you give syntocinon in a normal vaginal delivery?**

2. **How would you manage post partum haemorrhage in ED?**

3. **How do you diagnose diabetic ketoacidosis?**

4. **What are the principles of managing diabetic ketoacidosis?**

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


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
II

QUIZ answers 13th Sept 2017

1. **When would you give syntocinon in a normal vaginal delivery?**

RANZCOG guidelines state:

> *Prophylactic oxytocin decreases both PPH greater than 500mL and the need for therapeutic uterotonics. Caution must be exercised if there is the possibility of an undiagnosed second twin (i.e., no ultrasound in pregnancy). A number for oxytocic regimens have been used and each has its advocates. The most popular regimens are oxytocin 5 or 10 units IM or IV or Syntometrine 1mL IM (ergometrine 0.5mg + oxytocin 5 units).*

The accepted local regime is Syntocinon 10 units IM or IV after delivery of the foetal anterior shoulder, or immediately after the birth of the baby (so long as you are sure that there isn't another baby in there!).

2. **How would you manage post partum haemorrhage in ED?**

Prevention is acheived by active management of the 3rd stage of labour with oxytocin as above, cord clamping within the first few minutes after delivery and gentle cord traction with uterine counter traction to assist delivery of the placenta (aka controlled cord traction).

Preparedness means recognition of risk factors and ensuring that delivery happens in an appropriate setting where PPH can be recognised and managed both medically and surgically. Risk factors include:

ATony – large baby, multigestation, prolonged labour, tocolytics
Trauma to birth canal - instrumental delivery
Tissue – retained products
Thrombin deficiency (coagulopathy)

Recognition is important, as visual estimation of blood loss is underestimated. PPH is defined as >500mL blood loss in vaginal delivery and >1000mL in caesarean.

Management includes:

Summon appropriate help, notify Operating Theatre
Blood back – Xmatch/massive transfusion protocol
Apply monitoring, oxygen, large IV access x 2
Rx Tranexamic acid 1g stat
Addressing the four Ts

Tone	*Massage the uterus, Empty the bladder*
	Oxytocin 5U slow IV followed by infusion
	Oxytocin 40U in 500mL at 125mL/hr
Trauma	*Inspect the birth canal*
Tissue	*Inspect the placenta for missing parts*
Thrombin	*Massive transfusion protocol*

Expect to need to go the operating theatre.

3. **How do you diagnose diabetic ketoacidosis?**

BGL > 11mmol/L or known diabetes*
pH <7.3
HCO3 <15mmol/L
Serum ketones >0.6mmol/L

**Note that euglycaemic DKA can occur in pregnancy, patients on SGL T2 inhibitors, reduced oral intake and with prehospital insulin use.*

4. **What are the principles of managing diabetic ketoacidosis?**

Fluids	*Shocked patients receive 500mL fluid boluses (Hartmann's)* *Otherwise correct deficit over 24-48 hours*
Potassium	*Insulin therapy will cause K^+ to drop precipitously* *K^+ <3.0mmol/L, replace K^+ before starting insulin therapy* *K^+ <4.0mmol/L, give K^+ 10mmol/hr* *K^+ <5.0mmol/L give K^+ 5mmol/hr* *K^+ >5.0mmol/L, hold K^+ replacement until K^+ falls <5mmol/L*
Insulin	*Mild DKA can be managed with SC insulin – see SVH protocol* *Mod-severe DKA needs insulin infusion – see SVH protocol* *Aiming for reduction of BGL 3-5mmol/L/hr initially*
Treat precipitant	*E.g. Infection, acute abdomen, trauma, silent AMI, drugs.*
Other therapies	*Thromboprophylaxis* *Magnesium replacement* *Phosphate replacement*

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

P waves regular rate 75/min but non conducted
Regular ventricular rate 48/min
QRS axis just right of 90 degrees (Lead I slightly negative)
QRS narrow
Normal R wave progression
ST segments grossly elevated (10mm) inferiorly with III > II so likely RCA
Reciprocal ST depression in I and V5-6
ST depression aVR, V1-3 could indicate posterior wall infarction

- ➔ *Inferoposterior infarction due to RCA occlusion*
- ➔ *3rd degree heart block due to blocked AV nodal artery (branch of RCA)*

Rahul saw this patient at another hospital –> Cath lab – 97% RCA occlusion