EKG'S AT A GLANCE

APPROACH TO EKG'S

RATE	INTERVALS
RHYTHM	*(PR,QRS,QT,QTC)*
AXIS	EKG DIAGNOSIS
(P,QRS)QT)	CLINICAL DIAGNOSIS

RATE

300, 150, 100, 75, 60, 50… …
300 / large lines

RHYTHM

Follow the rhythm from the SA node

- Begin with P waves
  --Check a VR: P wave should be inverted; if upright consider ectopic rhythm or lead reversal.
- Then AV node
- Then Ventricle

AXIS (QRS)

If Left axis

- Check for LBBB, LVH, MI, others
- If above not present, consider LAFB

If Right axis

- Check for RVH, MI, other
- If above not present, consider LPFB

AXIS (T)

Is the T wave axis similar or opposite the QRS axis

- If opposite consider secondary cause of T wave changes (e.g. strain)
- LBBB,RBBB,LVH,RVH,WPW

INTERVALS

PR INTERVALS

- 1º,2º,3º av Blocks, WPW

QRS Interval

- If wide (>0.12 sec.) consider LBBB, RBBB, ventricular beats, WPW

QT Interval

- If abnormal think of electrolyte abnormalities, drugs, other

EKG DIAGNOSIS

Follow a system

- P,Q,QRS,ST,T

P WAVES

- V1 Inverted – LAA (Left atrial abnormality)
- Lead II peaked – RAA (Right atrial abnormality

Q WAVE

- Think MI
- If present then immediately look at the ST and T wave To determine the age of the MI (acute, recent, age undetermined or old)
  - ST elevated – Acute
  - ST elevated / T inverted – Recent
  - ST normal and T inverted or Flat – Age undetermined
  - ST normal and T Normal – Old

QRS

- Wide – LBBB (up in I, V6) RBBB (up in V1)
- Tall – LVH
- Small – Low voltage
- V3 <3mm=PRWP
- Up in V1
  - Narrow – RVH, Posterior MI
  - Wide – RBBB, WPW

ST WAVES

- Elevated – Subepicardial injury, pericarditis, early repolarization, secondary ST changes, non-specific changes
- Depressed – subendocardial injury, secondary ST changes, drugs, non-specific ST changes

T WAVES

- Inverted – Inschemia, secondary changes, other
- Peaked – electrolyte abnormalities, ischemia
- Flat – electrolye abnormalities, other

ALWAYS TRY TO MAKE A CLINICAL DIAGNOSIS

AFTER INTERPRETING THE EKG