Patient Name:

DOB: Age:

Hospital Number: ECG Date:

Presentation:

ECG

Calibrated at 1mm:10mV? ☐ Paper at 25 mm/s? ☐

Lead position: right arm clockwise (R,Y,G,B) + V4R in all under-5s? ☐

RATE

Regular (300 / R-R interval):

Irregular (6 x pnumber of complexes in rhythm strip) :

RHYTHM

Assess LEAD II. 1 small square = 0·04s therefore 1 big square = 0·2s

P wave before every QRS?
?SVT, ?Heart Block

PR Interval

< 2 y	0·08 – 0·16s
2y - 15y	0·09 – 0·18s
>16 y	0·12 – 0·2s

QRS Duration

<2y = <0·08s	>16y = <0·12s

NB Lengthens with age: 'normal' can represent slight prolongation i.e. BBB

QTc Interval

< 6 months	Variable
> 6 months	< 0·44s

QTc = QT/√preceding R-R(s)

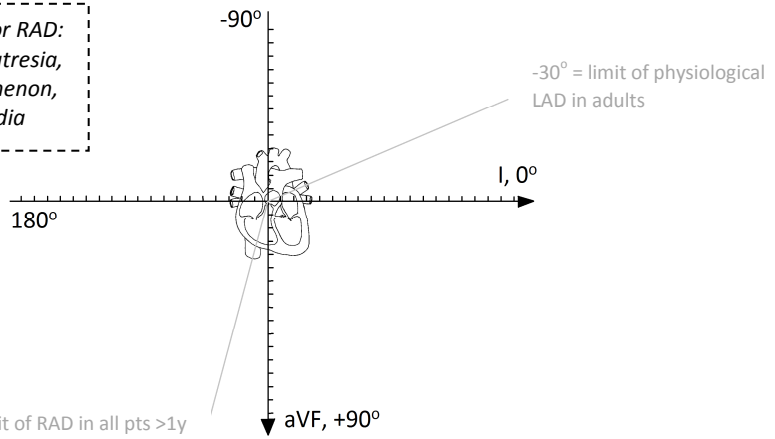
AXIS

P wave axis (i.e. SAN location) normal?
Normal = positive in I, III and aVF

QRS axis

NB RAD normal in <3/12, normalising to LAD by 1y & progressing to adult parameters by 8y.

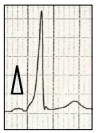
Causes of superior RAD: AVSD, Tricuspid atresia, Ebstein's phenomenon, WPW, Dextrocardia



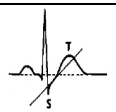
MORPHOLOGY

P wave (lead II)
Normal amplitude < 3mm
Normal duration: < 0·07s (infants) / < 0·09s (children)
RED FLAG*: tall (RA) and wide (or bifid, LA) = combined atrial hypertrophy*

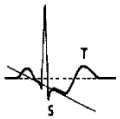
QRS complex
Normal Variants:
- RSR' in V1-V3 in neonates, persisting in 7% of under-5s
- R wave dominance generally regresses by 4y
RED FLAGS**:**
- Delta Wave
- Q waves in I and aVL
- Deep Q waves (>5mm) inferolaterally
- BBB (WiLLiaM MaRRoW)



ST segment
Normal variant: Upsloping ST depression



RED FLAGS:
1) Down-sloping ST

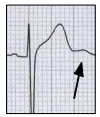


2) Horizontal ST depression > 0·08s

T wave
'Juvenile pattern': Inverted T waves in V1-V4 are physiological after 48hrs of age, persisting in V1 until 8y and often into adolescence.
RED FLAGS: *Tall (>2/3 R wave), peaked // Flat // Deeply inverted*

U wave

Normal finding in sinus bradycardia:
- small (0·5mm) and same direction as T
RED FLAGS: *inverted or large U waves*



OUTCOME

Interpretation: NORMAL ABNORMAL
Comment:

Referral indicated?

- Discussed with attending consultant: Y / N
- Refer to cardiology SpR at GOSH, **Tel. 0207 405 9200**

Name: Grade:

Signature: Date: