**Infarct locations**

|  |  |  |
| --- | --- | --- |
| **Site** | **ST ↑** | **ST ↓** |
| Anterior | I, aVL, V1-6 | III and aVF |
| Lateral | I, aVL, V5-6 | II, III and aVL |
| Inferior | II, III, aVF | I and aVL |
| Right Ventricle | V1 and V4rIII > II | I and aVL |

 ***GTN in right ventricular infarcts ?→* ↓↓↓*BP***

**References**[1] http://lifeinthefastlane.com/ecg-exigency-004/

|  |  |  |  |
| --- | --- | --- | --- |
| **I** LateralCircumflexArtery | **aVR** | **V1** SeptalLeft AnteriorDescendingArtery | **V4** AnteriorRight CoronaryArtery |
| **II** InferiorRight CoronaryArtery | **aVL** LateralCircumflexArtery | **V2** SeptalLeft AnteriorDescendingArtery | **V5** LateralCircumflexArtery |
| **III** InferiorRight CoronaryArtery | **aVF** InferiorRight CoronaryArtery | **V3** AnteriorRight CoronaryArtery | **V6** LateralCircumflexArtery |

**Tachycardia**

Sinus ‘Normal’ rhythm above 100 bpm

SVT Excess Atrial to SA impulses → narrow
 complex. Can reach 300 bpm. Attempt vagal manoeuvres → cardioversion.

VT Broad complex tachycardia. Monomorphology (common) or Polimorphology (Torsaides).
Decreased CO → ↓ ♡ perfusion → VF.
Shock if pulseless.

***Consider broad complex tachycardias (BCT) as VT first!***VT accounts for 80% of cases of BCT and 95% of cases of BCT in patients with structural ♡ disease. [1]

**Step wise 4 lead interpretation**

1. Is electrical activity present?
2. What is the ventricular QRS rate?
60-100 Normal, < 40Absolute Bradycardia
3. Is the QRS regular, regularly irregular or irregularly irregular?
4. Is the QRS Wide or Narrow? > 3 small squares
5. Is atrial P wave activity present?
	1. Relationship between other P waves?
	2. Relationship between QRS?
		1. PR interval?
		2. Associated?
		3. Disassociated?
		4. Wandering?
6. P waves before every QRS?
7. QRS after every P wave?

**Intrinsic heart rates**

|  |  |
| --- | --- |
| **Location** | **Beats Per Minute** |
| Sino Atrial Node | 100 - 60 |
| Atrial cells | 60 - 55 |
| AV Node | 50 - 45 |
| HIS | 45 - 40 |
| Bundle branch | 45 - 40 |
| Purkinje | 40 - 35 |
| Myocardial cells | 35 - 30 |

**Heart blocks**

1° PR > 3 small squares, regular
2° I PR widening until skipped QRS and resets,
 Regularly irregular
2° II No pattern to PR interval, Sometimes QRS
 skipped to **dangerous** **standstill**. Atropine if symptomatic.
3° Disassociation of atria and ventricles.
 Wide QRS. Bradycardic.

**Bundle branch blocks**



RBBB Wide QRS, RsR ‘M shape’ in V1-3,
Wide slurred S wave in lateral leads

LBBB Wide QRS, Dominant S wave in V1,
Broad monophasic S wave in lateral leads,
Absent Q wave in lateral leads