Correction + Abbreviations

Physiology Team

Lecture 2 – Cardiac Electrical Activity

Team Work

The difference between Ventricle action potential and SA node :

	Ventricle Action Potential	SA Node Action Potential
Resting Membrane potential (RMP)	(-85 to -95)	(-55 to -60)
Fast sodium channels	Open	Closed The cause: the membrane potential is -55 mV (more negative)
Slow Calcium-sodium channels	Open In the plateau phase	Open
Speed Of Develop	Faster	Slower The cause: Only the slow sodium channels can be activated
Speed Of Return to RMP	Faster	Slower

Less Negative

Female Slides

Factors affecting VR (Preload)

- **Muscle pump.:**

  Rhythmical contraction of limb muscles as during normal locomotion (walking, running, swimming) promotes venous return by the muscle pump mechanism.

- **Sympathetic vasoconstrictor tone:**

  Sympathetic activation of veins decreases (Decrease in diameter) increases central venous pressure and promotes venous return and augmenting cardiac output through the Frank-Starling mechanism, which increases the total blood flow through the circulatory system.

- **Respiratory activity.:**

  During inspiration, the venous return increases because of a decrease in right atrial pressure.

Some abbreviation in Cardiac Cycle lecture

Abbreviation	Stand for
Vs	Valves
B/t	Between
w/out	Without
LV	Left Ventricle
VR	Venous Return
MP	Main Pressure
Bl	Blood

We did not write them in our team work because the doctor said she will send it later on but maybe she forget that ☺