

Figure 1-5 The flow of electrolytes across the cell membrane during the various cell phases. (The abbreviation K^+ means potassium and Na^+ .)

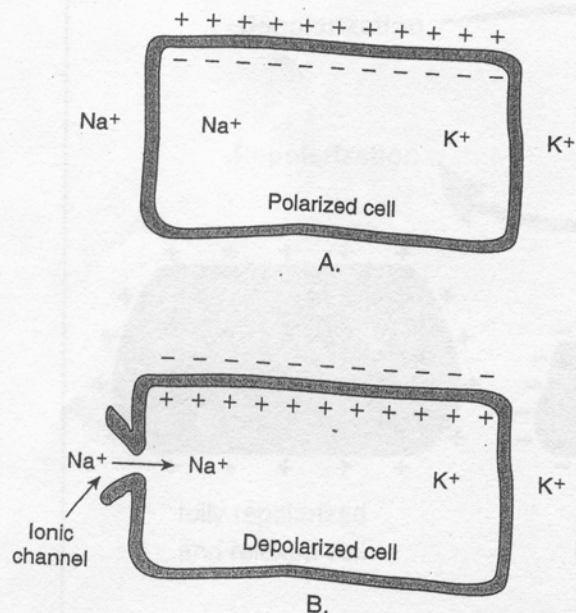


Figure 1-7 A. Electrolyte flow and alignment of membrane charges during cell rest. Ionic channels are closed. B. Sodium flows into the cell via an open ionic channel during depolarization.

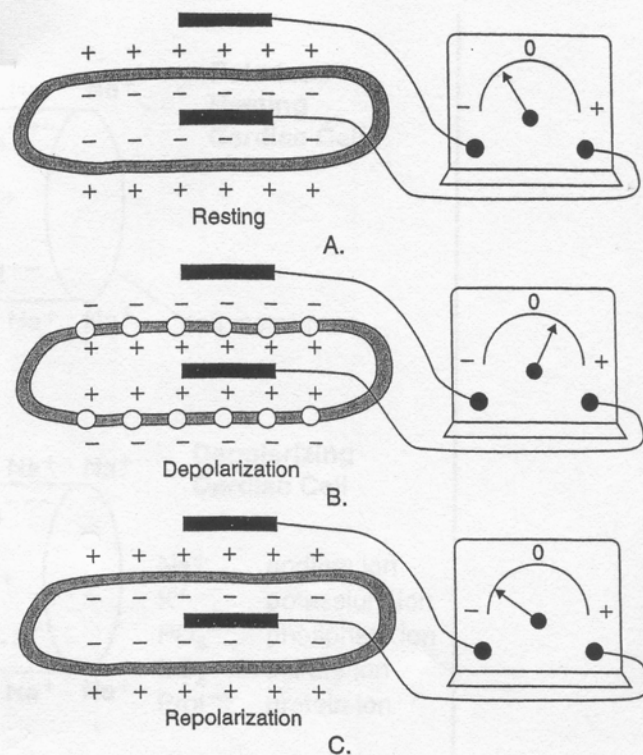


Figure 1-6 Cellular events during an action potential showing: A. Resting negative membrane potential; B. Depolarization with reversed (positive) potential; and C. Reestablishment of resting negative membrane charge during repolarization.

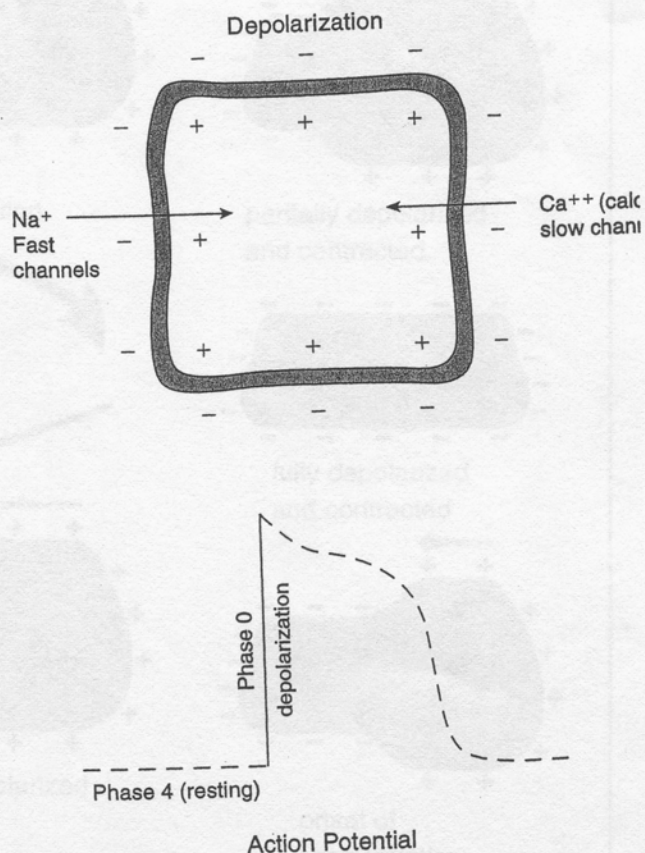


Figure 1-8 A. During depolarization, sodium (Na^+) rushes into the cell along with calcium (Ca^{++}). B. As the cell charge changes from negative to positive, depolarization (phase 0) occurs. An action

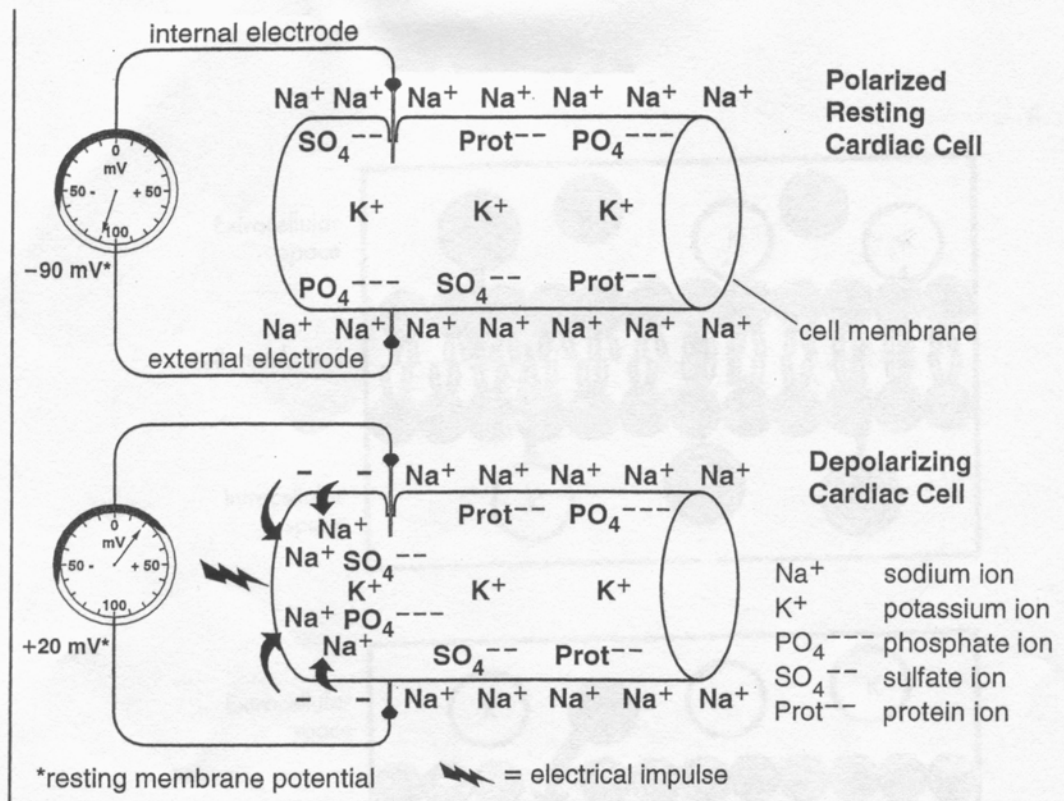


Figure 1-9 Membrane potentials of polarized and depolarized cardiac cells.

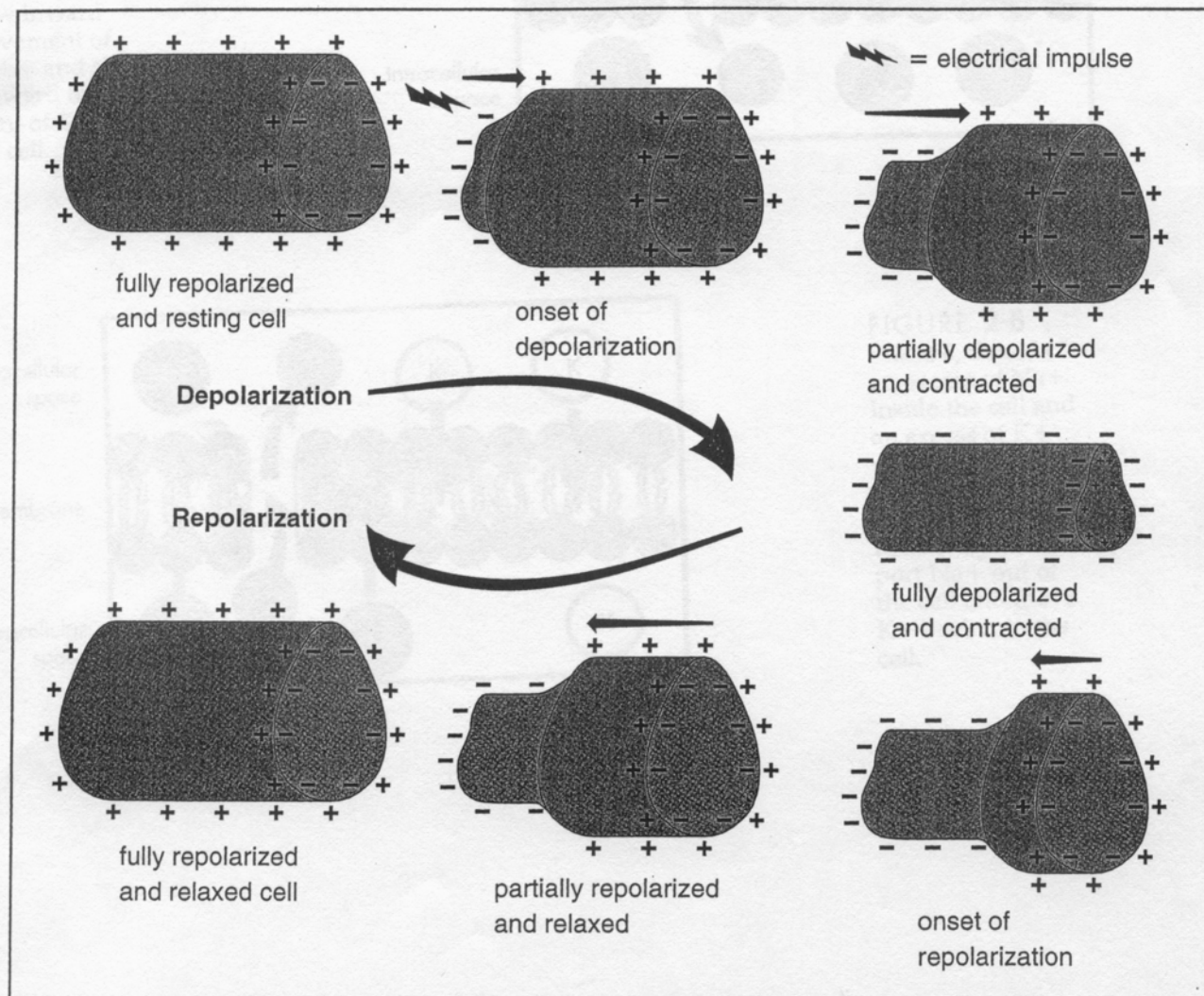


Figure 1-10 Depolarization and repolarization of a myocardial cell.

FIGURE 2-6

Phase 0 of cardiac action potential represents depolarization. Na^+ moves rapidly into the cell through the fast Na^+ channels, K^+ leaves the cell, and Ca^{++} moves slowly into the cell through slow Ca^{++} channels.

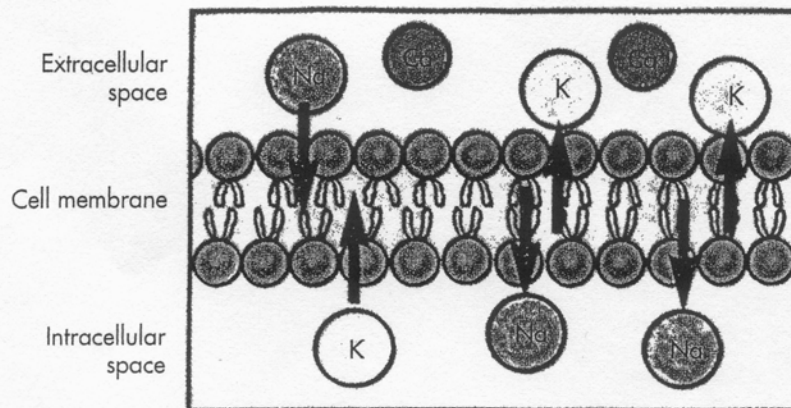


FIGURE 2-7

Phase 2 (plateau phase) of the cardiac action potential is caused by slow inward movement of Ca^{++} and slow outward movement of K^+ from the cell.

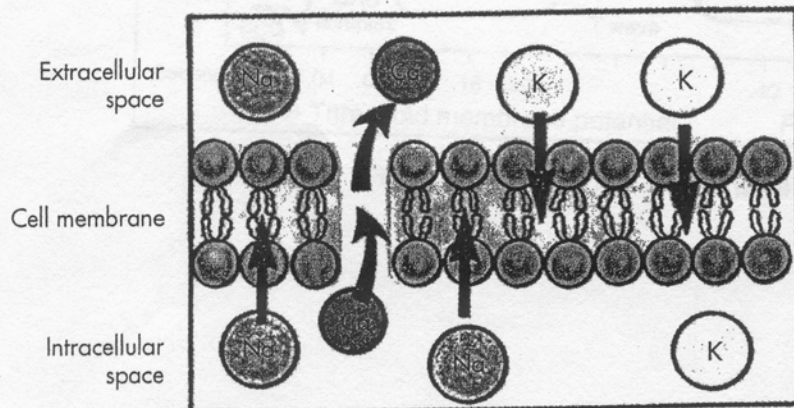
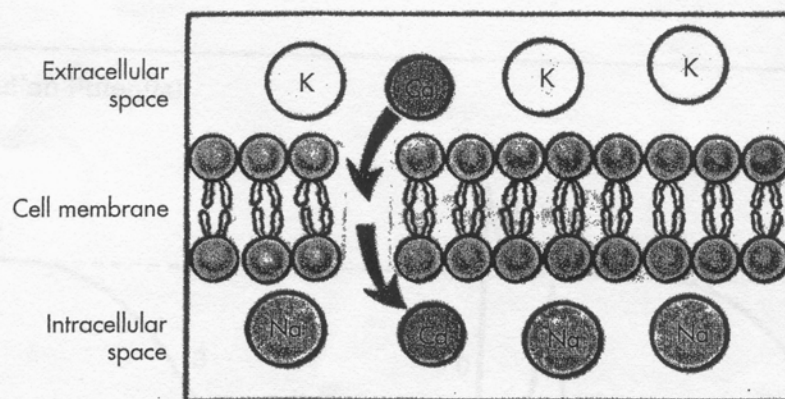


FIGURE 2-8

Phase 4, there is an excess of Na^+ inside the cell and an excess of K^+ outside the cell. The Na^+/K^+ pump is activated to actively transport Na^+ out of the cell and move K^+ back into the cell.

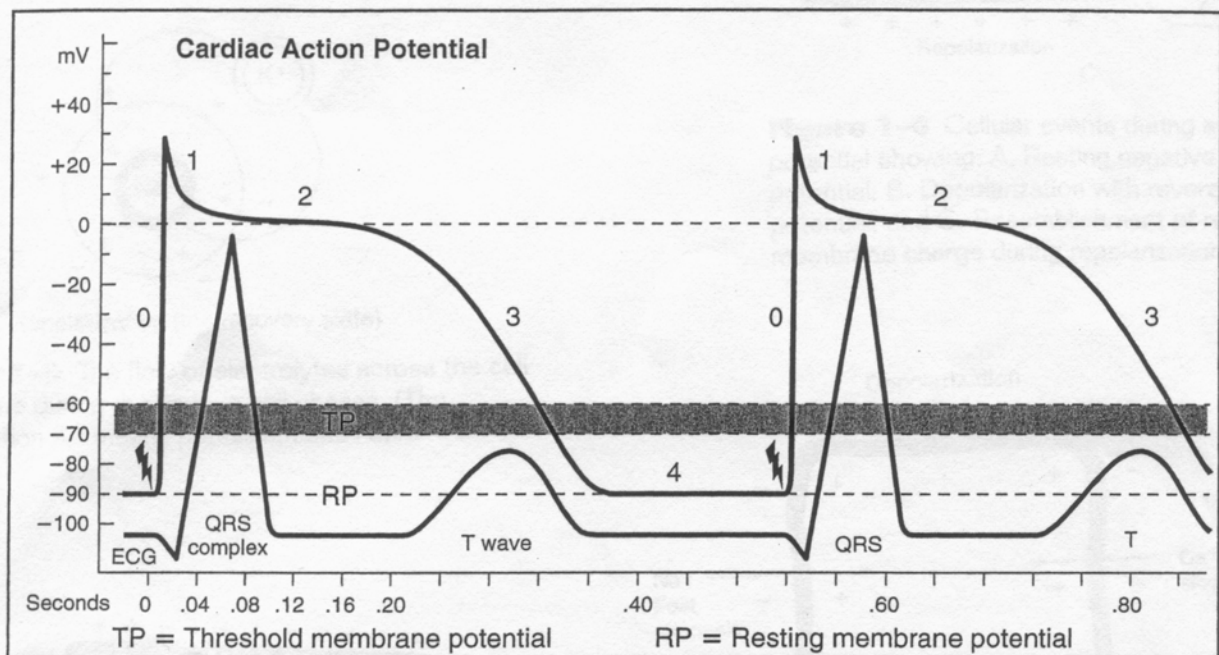


Figure 1-11 Cardiac action potential of myocardial cells.